

Pyle

PRELIMINARY REPORT

AT SEA SURVEY

MAY - JUNE 1967

LEEWARD ISLANDS #19

Prepared by Robert L. DeLong

Leewards Island Survey # 19
Preliminary Report, At-Sea Survey
May - June 1967

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This report summarizes at-sea observations by Smithsonian personnel during Leeward Island Survey 19, 23 May - 14 June, 1967. Excellent cooperation was received from officers and crew of the light tugs.

After departing Honolulu May 23, a stop was made at French Frigate Shoals to disembark personnel (Amerson and Lewis) and their gear on 25 May. On 26 May, Gardner Pinnacles was visited and on 28 May a stop was made at Pearl and Hermes Reef. From there the vessels proceeded directly to Midway Island for refueling, and returned to Pearl and Hermes on 30 May. The vessels moved to Lisianski June 1-2, moved on to Laysan June 6-7, and departed Laysan June 12, arriving in Honolulu June 15.

Interisland and off shore (within 2 miles of land) observations are incomplete as preparations were being made for island landings. No collecting at sea was done on this survey. Loran and celestial fixes were used throughout the trip. Weather was generally good throughout the survey.

In ten days (23-25, 26*28*30 May, and 12 - 14 June), 82.4 hours of observations over 1054 diurnal miles were covered. During this period, 4623 birds of 19 species were recorded, after eliminating presumed duplicate sightings from the two ships. Simultaneous observations were conducted from two ships during 5 days (24 - 28 May) of the outbound leg, totaling 40.8 hours and covering 421 miles. The vessels were side-by-side and separated four miles to test the basic assumption that two independent observers traveling the "same" track will see the same birds. On the return trip, diurnal observations were shared by the two vessels with the observing vessel always in the leading position. These separate observations were then lumped to give daily totals.

Discussion: By using identical vessels and operating over the "same" waters at the same times, we have eliminated many of the variables encountered in comparison of at-sea observations taken at different times, under varying conditions.

As can be seen from table 3, daily totals show large variances between observers on the two ships. The large discrepancies generally lie in the number of flocks seen by the independent observers, i.e. one observer records a flock of Sooty Terns and Wedge-tailed Shearwaters that is not visible to the other observer, thus increasing his total birds well above the other observer.

Probably more comparable is the number of species seen each day by the two observers. As seen from table 3, this number does vary between observers. During the 5-day test period, observers on Vessel A saw two sea bird species not recorded on Vessel B, and Vessel B recorded four sea bird species and two accidental species not recorded by Vessel A. These non-mutually observed species were usually a single sighting of sometimes a few birds, thus may not be as significant as they appear. However, there remains a difference;

* Partial days of observation.

it represents 24 o/o of the total species recorded by Vessel B. This percentage figure makes the difference appear too significant unless the observer is interested in every possibility of species occurrence. If so, in this case two independent observers did not record the same species.

Why did not both observers record all of the same birds? It is a matter of distribution. An example: If we use a three foot square sample plot and spread, randomly, 30 red and 30 blue marbles and two green and two yellow marbles on this sample plot, any two similar transects will probably sample representatively the common marbles (red and blue) but probabilities are slight that both transects will sample the uncommon marbles (green and yellow). Thus it is with sampling bird populations. Both observers record representative numbers of common birds species, but uncommon species of low density may not be recorded by both observers.

Secondly, there is variance between observers. Observers vary in quality, but perhaps more important, individual observers vary through time. Extended periods of observations "dullen" an observer. Two observers on duty can, and often do, cause mutual distraction and at times an observer may not fee up to normal. All of these lessen the uniformity, and hence the quality of the observations.

In species accounts that follow, species totals for the cruise include, for the period's duplicate observations, only the observations from Vessel A.

Laysan Albatross

31

Low albatross numbers are believed to result from recording techniques used for ship followers. By convention, only the daily high numbers are recorded as daily totals (This assumes that the ship followers accumulate during the day). Albatross do not follow for extended periods the small vessels used on this survey. Hence, the totals recorded are low and not indicative of actual densities. One concentration of 16 birds was recorded on 30 May between Midway and Pearl and Hermes.

Black-footed Albatross

72

The greater number of this species recorded over Laysan Albatross probably indicates this species' greater tendency to follow ships. These numbers are low for reasons outlined in the preceeding account and are believed not to reflect actual densities.

Wedge-tailed Shearwater

1766

Ten dark phase birds were recorded, primarily in the main Hawaiian Islands. Only one dark phase bird was recorded in the western leeward island area. Dark phase birds were also uncommon among the breeding populations present in the western leeward islands. This species represented 38.2% of total birds observed. They were found commonly in feeding flocks as usual.

Buller Shearwater

1

One bird was recorded on 30 May at 28° N, 177°18' W.

Sooty Shearwater

4

Only four birds were recorded. Three of them were in the main Hawaiian Islands and one recorded between Midway and Pearl and Hermes Reef.

Newell Shearwater	27
All but one of these birds were recorded off the south end of Niihau Island. The birds were feeding there in late evening.	
Christmas Shearwater	2
The two birds were recorded enroute to French Frigate Shoals. As on last June's cruise, no birds were recorded at sea over the western leewards where they are breeding and on eggs at this time.	
Dark-rumped Petrel	1
Only one bird was positively recorded as this species, near Niihau on 24 May.	
Bonin Petrel	47
The majority (38) of these birds were recorded 27 May while passing 60 miles offshore of Lisianski Island.	
Bulwer Petrel	128
Main concentrations were in waters near main Hawaiian Islands. The birds might be breeding here at this time. At-sea numbers are low in western leewards where birds were found on eggs.	
Leach/Harcourt Storm Petrel	2
These were recorded only as white rumped storm petrels, and belong to one of the above species.	
Red-tailed Tropicbird	8
The low numbers of tropicbirds recorded might have two possible explanations. The birds are normally attracted to larger ships and, like the albatross, do not follow the small ships. Or, the birds were on eggs and spending much of the daytime courting over the islands, thus limiting their pelagic movements.	
Blue-faced Booby	30
Small numbers were recorded throughout the cruise with concentrations near Gardner Pinnacle (a breeding area) and in the vicinity of Kaula Rock off Niihau.	
Brown Booby	18
Only one bird was recorded in the western leewards. The remaining 17 birds were recorded on 14 June in the vicinity of Niihau.	
Red-footed Booby	69
The most abundant booby recorded, because of the 55 observed on 14 June, near Niihau.	
Great Frigate	29
Seen in small numbers throughout the entire survey. They were generally associated with feeding flocks.	
Pomarine Jaeger	6
All observed offshore of Oahu on 23 May.	

Skuas

2

Two birds were recorded on 13 June in the vicinity of French Frigate Shoals. Another bird was seen by Vessel B during duplicate observations in the western leewards.

Ruddy Turnstone

15

Eleven birds were recorded off Pearl and Hermes Reef on 28 May, three off the same atoll on 30 May and one off Laysan Island on 12 June.

Wandering Tattler

1

One bird was seen off French Frigate Shoals.

Arctic Tern

3

Three birds were recorded as this species by observers on Vessel B during duplicate observations.

Sooty Tern

1447

This species represented 31.9 percent of the total birds recorded (second only to Wedgetails).

Recorded densities were highest in the western leeward islands where there are large breeding colonies. Daily numbers were not as high as might be expected, but probably represent normal pelagic numbers. Had offshore observations (within 2 miles of land) been taken, totals would have been much higher. All birds recorded were adults.

Gray-backed Tern

57

Small numbers were recorded in the western leewards, but nearly half of the total were recorded near Niihau on 14 June.

Blue-gray Noddy

4

Four birds were recorded near Gardner Pinnacles on 26 May.

Brown Noddy

189

The species was recorded daily (generally in feeding flocks) in the western leewards. A large concentration of 107 birds (62 percent of the total) was seen on 14 June near Niihau.

Black Noddy

39

Thirty-one of the birds were seen off Pearl and Hermes Reef on 30 May. The remaining birds were seen, a few each day, enroute to Oahu from Laysan Island.

White Tern

185

Regular sightings were recorded in the western leewards. On 30 May, between Midway and Pearl and Hermes, 113 birds were recorded. The majority of these were in feeding flocks, but many were single sightings as well.

TABLE I.

SUMMARY OF NON DUPLICATE OBSERVATIONS

Species	May 23	May 28	May 30	June 12	June 13	June 14	Totals
Laysan Albatross		15	16	2		1	34
Black-footed Albatross		16	30	6	2		54
Sooty Shearwater			1			1	2
Wedge-tailed Shearwater	88	13	61	381	38	189	770
Newell Shearwater					1	26	27
Buller Shearwater			1				1
Christmas Shearwater							
Bonin Petrel			1	7	1		9
Dark rumped Petrel							
L. <u>Pterodroma</u>					1(P.e.e.)	1	2
S. <u>Pterodroma</u>			1			1	2
Bulwer's Petrel	1		1	2	5	50	59
Leach's Petrel							
Storm Petrel sp.						1	1
Shearwater/Petrel							
Procellaridae							
Red-tailed Tropicbird		2	1	1	4		8
Red-footed Booby	3		1	3	2	55	64
Blue-faced Booby			2		3	10	15
Brown Booby						17	17
Booby sp.							
Great Frigatebird		3	1	4	2	2	12
Tern sp.							
Gray-backed Tern		1	5	7	9	24	46
Sooty Tern	74	38	171	209	77	157	726
White Tern		17	113	4		7	141
Arctic Tern							
Sterna sp.						2	2
Brown Noddy	14	1	1	1	5	107	129
Black Noddy		21	31	2	1	5	60
Blue-gray Noddy							
Noddy sp.						1	1
Skua					2		2
Pomarine Jaeger	6						6
Jaeger							
Ruddy Turnstone			3	1			4
Golden Plover							
Wandering Tattler							
Phalarope							
TOTALS	186	127	441	631	152	657	2195
HOURS	2.5	2.2	6.3	11.0	12.3	13.0	47.3
MILES	25	30	74	128	139	145	541

TABLE II.

SPECIES OBSERVATIONS, DUPLICATE OBSERVATION PERIOD, LEEWARDS 19, 24-28 May 1967

DATE VESSEL	24 May		25 May		26 May		27 May		28 May		TOTALS	
	A	B	A	B	A	B	A	B	A	B	A	B
Laysan Albatross			2	4	1	6	37	1	3	9	45	
Black-footed Albatross	4		16	41	4	17	10	34	3	37	95	
Sooty Shearwater												
Wedge-tailed Shearwater	338	345	65	204	300	150	298	175	8	27	1009	901
Newell's Shearwater		3									3	
Christmas Shearwater	1	2	1					1			2	3
Bonin Petrel							38	35			38	35
Dark-rumped Petrel							8	1			69	67
Bulwer's Petrel	49	46	8	15	4	5	1				1	4
Leach's Petrel	1			2				2			3	
Storm Petrel sp.	2		1				6				372	6
Shearwater/Petrel	363	5	3	1	1		1	1	1		2	2
Red-tailed Tropicbird					1						9	16
Red-footed Booby	8	12	1	3	15	1	2				17	4
Blue-faced Booby				3	1						1	
Brown Booby					1						20	9
Great Frigatebird	7	4	3	3	8	2	2				12	8
Gray-backed Tern	3				7	8	2				759	828
Sooty Tern	43	133	110	433	521	211	64	22	21	29	61	27
Brown Noddy	7	4	10	14	29	3	15			6		1
Black Noddy				1			2					4
Blue-grey Noddy					4		2					2
White Tern	46	58	4	4	9		2	2	1	61	65	
Miscellaneous	2		52	2	3		4	3	11	5	72	10
TOTALS	874	612	276	730	906	400	458	314	44	75	2558	2131

TABLE III.

SUMMARY OF DUPLICATE OBSERVATIONS, LEEWARDS 19, 24-28 May 1967

May	24		25		26		27		28		Totals	
Vessel	A	B	A	B	A	B	A	B	A	B	A	B
# Hours	11.3		5.4		9.5		13.6		1.0		40.8	40.8
# Sightings	146	159	84	99	87	65	146	158	22	27	485	508
# Flocks	11	9	2	9	6	4	1	2	2	2	22	26
# Species	13	16	10	15	13	10	13	13	5	8	19	25
Total Individuals	874	612	276	730	904	400	458	314	44	75	2556	2131

Date 24 MAY 67 Ship LT. 2087 Cruise No. _____
 Organization SI Recorder 2087

Sunrise: Time 0603 Position: Lat. 21-46, Long. 161-05

Sunset: Time 1931 Position: Lat. _____, Long. _____

Miles travelled from 0000 hours to sunrise = _____

Miles travelled from sunrise to sunset = 170

Miles travelled from sunset to 2400 hours = _____

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.				
2.				
3.				
4.				
5.				

782
54
28
14

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.	Air Temp.
0100							
0200							
0300							
0400							
0500							
0600	21-46N	161-05W	095T	23	090	3-5'	75
0700	51 ²⁵	16 ³⁵					
0800	21-55N	161-26 ¹⁰	095T	23	090	4-6	
0900	38 ³⁶	40 ²⁴					
1000	22-07N	161-54W	095T	23	090	4-6	26
1100	28 ²⁹	48 ¹⁴					
1200	22-24N	162-08W	095T	23	090	4-6	
1300	34 ³³	161-35 ³⁷					24
1400	22-31N	162-45W	095	21	090	5-6'	27
1500	35	37					
1600	22-41N	163-02W	090	25	090	5-6	
1700	35	13 ²²					
1800	22-51N	163-25W	095	25	090	4-6	
1900	2 ²	37 ²¹					
2000	22-53N	163-40W	093	25	090	2-4	
2100							
2200							
2300							
2400							

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Date 25 MAYShip LT 2087) Cruise No. _____Organization SIRecorder LT 2087Sunrise: Time 0620Position: Lat. 23-49N Long. 165-45WSunset: Time 1948

Position: Lat. _____, Long. _____

Miles travelled from 0000 hours to sunrise = _____

Miles travelled from sunrise to sunset = 50

Miles travelled from sunset to 2400 hours = _____

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.				
2.				
3.				
4.				
5.				

Hourly Positions:

13.5
 Time Latitude Longitude Wind Dir. Wind Sp. Wave Dir. Wave Hgt. Air Temp.

0100							
0200							
0300							
0400							
0500							
0600	<u>23-49N</u>	<u>165-45W</u>	<u>075</u>	<u>15</u>	<u>070</u>	<u>4-5</u>	
0700	<u>52²³</u>	<u>38</u>					
0800	<u>23-55N</u>	<u>166-02W</u>	<u>065</u>	<u>18</u>	<u>065</u>	<u>5-6</u>	
0900	<u>-33²⁵</u>	<u>29</u>					
1000	<u>23-50N</u>	<u>166-19-30W</u>	<u>063</u>	<u>14</u>	<u>063</u>	<u>1-2</u>	
1100	<u>1</u>	<u>1</u>					
1200	<u>23-50N</u>	<u>166-19-30W</u>	<u>060</u>	<u>10</u>	<u>065</u>	<u>1-2</u>	
1300	<u>1</u>	<u>1</u>					
1400	<u>23-50N</u>	<u>166-19-30W</u>	<u>065</u>	<u>10</u>	<u>065</u>	<u>2-4</u>	
1500	<u>49</u>						
1600	<u>23-48N</u>	<u>166-22W</u>	<u>064</u>	<u>14</u>	<u>070</u>	<u>1-2</u>	
1700	<u>34</u>	<u>27</u>					
1800	<u>23-55N</u>	<u>166-32W</u>	<u>070</u>	<u>12</u>	<u>060</u>	<u>4-5</u>	
1900	<u>24-00²⁵</u>	<u>41</u>	<u>0</u>				
2000	<u>24-05N</u>	<u>166-30W</u>	<u>070</u>	<u>15</u>	<u>065</u>	<u>4-6</u>	
2100	<u>24-23N</u>						
2200							
2300							
2400	<u>24-23N</u>	<u>167-12W</u>	<u>070</u>	<u>14</u>	<u>065</u>	<u>1-2</u>	

Date 26 MAYShip LT2087 ()Cruise No. Organization SIRecorder LT2087Sunrise: Time 0623

Position: Lat. _____, Long. _____

Sunset: Time 2005

Position: Lat. _____, Long. _____

Miles travelled from 0000 hours to sunrise = _____

Miles travelled from sunrise to sunset = 123

Miles travelled from sunset to 2400 hours = _____

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.				
2.				
3.				
4.				
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
0100						
0200						
0300						
0400						
0500						
0600	25-15'N	167-45'W	088	11	090	3-5
0700	25-08'N	167-52'W	088	11	090	3-5
0800	25-03'N	167-59-55'W	080	8	100	4-5
0900						
1000	25-00'N	167-59-35'W	080	10	100	4-5
1100	25-02'N	167-59-15'W	080	10	100	4-5
1200	25-05'N	168-03'W	050	10	070	4-5
1300	25-06'N	168-03'W	050	10	070	4-5
1400	25-17'N	168-32'W	055	10	070	3-5
1500	25-22'N	168-32'W	055	11	070	3-4
1600	25-26'N	169-06'W	055	11	070	3-4
1700	25-30'N	169-04'W	055	11	070	3-4
1800	25-33'N	169-02'W	055	11	070	3-4
1900	25-36'N	169-00'W	060	12	070	3-4
2000	25-39'N	169-00'W	060	12	070	3-4
2100						
2200						
2300						
2400	25-43'N	170-33'W	060	12	070	3-4

Date 27 Aug 67 Ship L1-2087 () Cruise No. _____

Organization SI Recorder L12087

Sunrise: Time 0635 Position: Lat. 26° 27' Long. 171° 45'

Sunset: Time 2022 Position: Lat. _____, Long. _____

Miles travelled from 0000 hours to sunrise = _____

Miles travelled from sunrise to sunset = 134

Miles travelled from sunset to 2400 hours = _____

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.				
2.				
3.				
4.				
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
0100						
0200	<u>26-05</u>	<u>170-55</u>	<u>080</u>	<u>10</u>	<u>070</u>	<u>3-4</u>
0300						
0400						
0500						
0600	<u>22-26N</u>	<u>171-51N</u>				
0700	<u>21 32</u>	<u>171 49</u>				
0800	<u>20 30</u>	<u>171 48</u>				
0900	<u>20 32</u>	<u>171 47</u>				
1000	<u>26-34N</u>	<u>172-15W</u>				
1100	<u>41 37</u>	<u>48 33</u>				
1200	<u>26-58N</u>	<u>173-21W</u>				
1300	<u>49</u>	<u>11 10</u>				
1400	<u>26-50N</u>	<u>173-00W</u>				
1500	<u>53 33</u>	<u>12 12</u>				
1600	<u>26-56N</u>	<u>173-24W</u>				
1700	<u>59 33</u>	<u>36 12</u>				
1800	<u>27-02N</u>	<u>173-40W</u>				
1900	<u>53 33</u>	<u>53 5</u>				
2000	<u>27-04.5N</u>	<u>173-58W</u>				
2100	<u>11 33</u>	<u>38 20</u>				
2200	<u>27-15N</u>	<u>174-14W</u>				
2300						
2400	<u>27-25N</u>	<u>174-22W</u>				

5R + 5H8 (0647)

55 - 83/5me - miles 74 miles

1300 - 2000

6.45

12 5me miles to 1200 48 miles

13

2.2

3

Date May 28 1967 Ship LT 2087 () Cruise No. _____
Organization SI Recorder Thompson

Sunrise: Time 0647 Position: Lat. 27°38', Long. 175°31'

Sunset: Time _____ Position: Lat. _____, Long. _____

Miles travelled from 0000 hours to sunrise = _____

Miles travelled from sunrise to sunset = 6900 _____

Miles travelled from sunset to 2400 hours = _____

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.				
2.				
3.				
4.				
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
0100						
0200						
0300						
0400						
0500						
0600	27°37'	175°29'				
0700	27°37'	175°29'	33	11		
0800	27°40'	175°32'	42	11		
0900	27°42'	175°30'				
1000						
1100						
1200						
1300						
1400						
1500						
1600						
1700						
1800						
1900						
2000						
2100						
2200						
2300						
2400						

Date 30 MAY 67 Ship 472097 () Cruise No. _____

Organization LT2097 Recorder _____

Sunrise: Time _____ Position: Lat. _____, Long. _____

Sunset: Time _____ Position: Lat. _____, Long. _____

Miles travelled from 0000 hours to sunrise = _____

Miles travelled from sunrise to ~~sunset~~ ¹⁶⁰⁰ = 74

Miles travelled from sunset to 2400 hours = _____

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.				
2.			40	
3.				12
4.				13
5.			35	

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
0100						
0200						
0300						
0400						
0500						
0600						
0700						
0800						
0900	28° 10' N	177° 24' W				
1000	06° 30' N	177° 42' W				
1100	03° 30' N	177° 12' W				
1200	24° N	176° 47' W	30	13	120	3-4
1300	02° 10' N	176° 30' W	39	17		
1400	28° 45' N	176° 20' W				
1500	27° 52' N	05° 15' W				
1600	27° 42' N	175° 50' W				
1700						
1800						
1900						
2000						
2100						
2200						
2300						
2400						

18
3
21

958b-SI-MNH
Rev. 9/28/66

24 MAY 1957
80 per cent flame

0600 27° 37'

0800 - 27° 42'

175° 24'

175° 50']

30°

Date 12 Jun 62 Ship 153087 () Cruise No. _____

Organization Navy Recorder 153087

Sunrise: Time 0632 Position: Lat. _____, Long. _____

Sunset: Time 2006 Position: Lat. _____, Long. _____

Miles travelled from 0000 hours to sunrise = _____

Miles travelled from sunrise to sunset = _____

Miles travelled from sunset to 2400 hours = _____

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.			35 38	0830: 25° 33'N, 171° 55'
2.			41 17	
3.				
4.			13 8	
5.			21 15	23 16
			13 9	11 12

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
0100						
0200						
0300						
0400						
0500						
0600						
0700						
0800	35	02 13				
0900	32	49 54				
1000	29	170-171				
1100	27	17				
1200	22	16				
1300	13	57 35				
1400	05 21	170-171				
1500	14	33				
1600	25-02N	170-15W				
1700	4	03 21				
1800	25-00N	169-56W				
1900	06	43				
2000	25-11N	169-20W				
2100						
2200	25-21N	169-13W				
2300						
2400						

149

Long-tail 1 ✓

P. longirostris 1 ✓

W. S. 8, 18, 47 83 + 106 = 189 ✓

Golden 2 - 15 - 6 23 + 27 = 50 ✓

Yellow 4 - 1 - 9 14 + 10 = 24 ✓

Yellow 2 - 4 6 + 1 = 7 ✓

Swallow 10, 2 - 34 46 + 111 = 157 ✓

A. Flycatcher 1 - 1 2 = 2 ✓

PEB 1, 19 20 + 35 = 55 ✓

Blue Noddy 11 - 29 40 67 = 107 ✓

PEB - 4 4 + 6 = 10 ✓

Stint 1 1 ✓

Blue Noddy 5 5 ✓

Noddy sp. 1 1 ✓

Stint 2 2 ✓

P. longirostris 1 1 ✓

B. Booby 1 1 + 16 = 17 ✓

251 ✓

Newell's
Sooty/Slb Slat 26 ✓

~~651~~
651

Date 23 May 67Ship LT 2086 ()

Cruise No. _____

Organization _____

Recorder _____

Sunrise: Time 1425 ^{Report PH} Position: Lat. _____, Long. _____Sunset: Time 1909 Position: Lat. 21° 19' N, Long. 158° 46' WMiles travelled from 0000 hours to sunrise = 0Miles travelled from sunrise to sunset = 48Miles travelled from sunset to 2400 hours = 60

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	0300	RADAR	<u>21° 27' N</u>	<u>160° 32' W</u>
2.	0433	RADAR	<u>21° 37' N</u>	<u>160° 49' W</u>
3.				
4.				
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
0100						
0200						
0300						
0400						
0500						
0600						
0700						
0800						
0900						
1000						
1100						
1200						
1300						
1400						
1500						
1600	<u>21° 15' N</u>	<u>158° 15' W</u>				
1700						
1800	<u>21° 16' N</u>	<u>158° 20' W</u>				
1900						
2000	<u>21° 20' N</u>	<u>158° 03' W</u>				
2100						
2200	<u>21° 25' N</u>	<u>159° 32' W</u>				
2300						
2400	<u>21° 28' N</u>	<u>159° 53' W</u>				

Date 24 MayShip LT 486 ()

Cruise No. _____

Organization _____

Recorder _____

Sunrise: Time 0603Position: Lat. 21-45', Long. 161-07'Sunset: Time 1931Position: Lat. 22 47N, Long. 163 35WMiles travelled from 0000 hours to sunrise = 75Miles travelled from sunrise to sunset = 162Miles travelled from sunset to 2400 hours = 52

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	0600	LORAN	21° 47'	161° 15'
2.				
3.				
4.				
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Sea State		Temp
					Air	Sea	
0100							
0200	21-28N	160-20W					
0300							
0400	21-35N	160-43W					
0500							
0600	21 47N	161-15W					
0700	54	31					
0800	22-00N	161-47W	075 23	4	080 46	72 76	
0900	56	34					
1000	22 10N	162 00W					
1100	52	37					
1200	22-15N	162-19W	075 23	4	025 46	76 78	
1300	20	34					
1400	22-24N	162-29W					
1500	28	40					
1600	22-32N	162-52W					
1700	40	49					
1800	22 47N	163-27W	075-22	4	025-24	75 72	
1900	52	37					
2000	22-56N	163-51W					
2100							
2200	23-07N	164-15W					
2300							
2400	23-10N	164-25W	075-20	4	020-24	72 74	

Date 25 MAYShip LT 2086 ()

Cruise No. _____

Organization _____

Recorder _____

Sunrise: Time 0616Position: Lat. 23-45, Long. 165-44Sunset: Time 1947Position: Lat. 24-06N, Long. 166-38WMiles travelled from 0000 hours to sunrise = 75Miles travelled from sunrise to sunset = 55Miles travelled from sunset to 2400 hours = 29

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.				
2.				
3.				
4.				
5.				

Hourly Positions:

Time	Latitude	Longitude	4 SPEED		Wind Sp.	Wave Dir.	Temp
			Wind Dir.	Cloud Cover, %			
0100							
0200	23-21N	164-55W					
0300							
0400	23-30N	165-15W					
0500							
0600	23-43N	165-41W	075-15	6	025-2-4	72-74	
0700	45	151					
0800	FRIEN 48	FRIEN 776 01	5000				
0900	2311	1617 10					
1000	"	"					
1100	"	"					
1200	FRIEN 88	FRIEN 876	5110				
1300	"	"	"				
1400	"	"	"				
1500	"	"	"				
1600	FRIEN 1	FRIEN 1661	51600				
1700	54	32					
1800	23-58N	165-34W	075 10	3	035 3-4	77	
1900	24-02	40					
2000	24-06N	166-16W					
2100							
2200	24-15N	166-58W					
2300							
2400	24-33N	167-32W	075 13	6	025 3-4	70	

Date 26 MAY Ship LT 2086 () Cruise No. _____

Organization _____ Recorder _____

Sunrise: Time 0622 Position: Lat. 24-49, Long. 167-37

Sunset: Time 2001 Position: Lat. 25-25, Long. 167-23

Miles travelled from 0000 hours to sunrise = 38

Miles travelled from sunrise to sunset = 94

Miles travelled from sunset to 2400 hours = 50

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	0440	CELESTIAL	24-41 N	167-37 W
2.	1315	RADAR	25-05 N	168-13 W
3.	2027	CELESTIAL	25-37 N	169-43
4.				
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
0100						
0200	24-32 N	167-22 W				
0300						
0400	24-40 N	167-33 W				
0500						
0600	24-42 N	167-11 W	078-12	7	030-2-4	70
0700	24-54 N	167-00 W				
0800	25-00 N	167-48 W				
0900						
1000						
1100						
1200	25-00 N	168-00 W				
1300	25-00 N	168-12 W				
1400	25-05 N	168-28 W				
1500	25-10 N	168-42 W				
1600	25-16 N	168-47 W				
1700	25-21 N	168-52 W				
1800	25-24 N	169-13 W	083/20	6	090-2-4	74 25
1900	25-28 N	169-28 W				
2000	25-33 N	169-38 W				
2100						
2200	25-46 N	170-02 W				
2300						
2400	25-50 N	170-28 W	087/18	4	090-2-4	72 74

Date 27 MayShip LT 2086 ()

Cruise No. _____

Organization _____

Recorder _____

Sunrise: Time 0637Position: Lat. 26-21 N Long. 171-45 WSunset: Time 2023Position: Lat. 27-08 N, Long. 173-10 WMiles travelled from 0000 hours to sunrise = 78Miles travelled from sunrise to sunset = 122Miles travelled from sunset to 2400 hours = 30

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	0530	CELESTIAL	26-16 N	171-31 W
2.	2050	CELESTIAL	27-11 N	174-07 W
3.				
4.				
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.	Temp	Brisket
							Avg	5cm
0100								
0200	26-03 N	170-53 W						
0300								
0400	26-11 N	171-17 W						
0500								
0600	26-18 N	171-37 W	110-17	8	090-2-4	72	73	
0700	22	30						
0800	26-27 N	172-02 W						
0900	31	15						
1000	26-35 N	172-28 W						
1100	39	40						
1200	26-43 N	172-57 W	130 18	6	090-2-4	79	73	3026
1300	43	01						
1400	26-45	173-10 W						
1500	52	14						
1600	26-55 N	173-28 W						
1700	58	38						
1800	27-01 N	173-37 W	130 15	2	090-2-4	73	74	3019
1900	09	34						
2000	27-08 N	174-01 W						
2100								
2200	27-14 N	174-23 W						
2300								
2400	27-20 N	174-37 W	132 18	2	090-2-4	72	76	3022

Date 28 May 67 Ship L72086 () Cruise No. _____

Organization _____ Recorder _____

Sunrise: Time 0646 Position: Lat. 27-35N, Long. 175-04W

Sunset: Time 2033 Position: Lat. 27-42N, Long. 176-00W

Miles travelled from 0000 hours to sunrise = 54

Miles travelled from sunrise to sunset = 25

Miles travelled from sunset to 2400 hours = _____

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	0413	CELESTIAL	27-33N	175-10W
2.				
3.				
4.				
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.	Temp	Barometer
0100								
0200	27-26N	175-54W						
0300								
0400	27-30N	175-07W						
0500								
0600	27-38N	175-27W	172-32	8	070-2-4	70	28	3014
0700	41	35						
0800	27 45	175 43W						
0900								
1000	PENEL & HERMOS	REEF						
1100	"	"	"					
1200	PENEL & HERMOS	REEF						
1300	"							
1400	"							
1500	"							
1600	"							
1700	"							
1800	PENEL & HERMOS	REEF						
1900								
2000	27-43N	175-58W						
2100								
2200	27-47N	176-11W						
2300								
2400	27-52N	176-25W	350-20	7	020-2-4	69		3014

Date 29 MAY Ship AT 2000 () Cruise No. _____

Organization _____ Recorder _____

Sunrise: Time 0653 Position: Lat. 28-00N, Long. 172-13W

Sunset: Time _____ Position: Lat. _____, Long. _____

Miles travelled from 0000 hours to sunrise = 69

Miles travelled from sunrise to sunset = 8

Miles travelled from sunset to 2400 hours = 0

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	0532	Position	28-05N	172-02W
2.				
3.				
4.				
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.	Wav. Hgt.
0100							
0200	27-57N	176-40W					
0300							
0400	28-02N	176-54W					
0500							
0600	27-56N	177-08W	180 E	9	245 1-2 71 73		30 06
0700							
0800	28-00N	176-40W					
0900	"	"					
1000	"	"					
1100	"	"					
1200	"	"					
1300	"	"					
1400	"	"					
1500	"	"					
1600	"	"					
1700	"	"					
1800	"	"					
1900	"	"					
2000	"	"					
2100	"	"					
2200	"	"					
2300	"	"					
2400	"	"					

Date 30 May 67 Ship LT 2086 () Cruise No. _____

Organization _____ Recorder _____

Sunrise: Time _____ Position: Lat. _____, Long. _____

Sunset: Time 2027 Position: Lat. 27-46N, Long. 175-18E

Miles travelled from 0000 hours to sunrise = 0

Miles travelled from sunrise to sunset = 90

Miles travelled from sunset to 2400 hours = 0

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	<u>1025</u>	<u>ROBAN</u>	<u>28-02</u>	<u>174-57W</u>
2.				
3.				
4.				
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
0100	<u>Midway</u>					
0200	"					
0300	"					
0400	"					
0500	"					
0600	"					
0700	"					
0800	"					
0900						
1000	<u>28-04N</u>	<u>177-03W</u>				
1100						
1200	<u>27-55N</u>	<u>176-32W</u>	<u>352 22</u>	<u>7</u>	<u>010 44 72</u>	<u>30-18</u>
1300						
1400	<u>27-46N</u>	<u>176-11W</u>				
1500						
1600	<u>PENAL</u>	<u>176-00E</u>	<u>REEF</u>			
1700	"	"	"			
1800	"	"	"			
1900	"	"	"			
2000	"	"	"			
2100	"	"	"			
2200	"	"	"			
2300	"	"	"			
2400	"	"	"			

Date 12 June Ship LT-2086 () Cruise No. _____

Organization _____ Recorder _____

Sunrise: Time _____ Position: Lat. _____, Long. _____

Sunset: Time 2009 Position: Lat. 24-47N Long. 169°55W

Miles travelled from 0000 hours to sunrise = 0

Miles travelled from ^{DEPARTURE} sunrise to sunset = 134

Miles travelled from sunset to 2400 hours = 44

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	0802	DEPARTURE	24 ⁰ 45N	169 ⁰ 27W
2.	2045	CELESTIAL	24 ⁰ 45N	169 ⁰ 27W
3.				
4.				
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.	Temp.	Hum.	Secs.
0100	24 ⁰ 50N	169 ⁰ 30W							
0200									
0300									
0400	24 ⁰ 50N	169 ⁰ 30W							
0500									
0600	24 ⁰ 50N	169 ⁰ 30W							
0700									
0800	24 ⁰ 50N	169 ⁰ 30W							
0900									
1000	25-26 N	171-26 W							
1100									
1200	25-30 N	171-11 W	115-8 N	4	070 2-4	80	77		
1300	25	71 09							
1400	25-21 N	170-51 W							
1500	14	34							
1600	25-06 N	170-18 W							
1700	01	03							
1800	24-57 N	169-55 W	100 10W	3	090 3-4	80	77		
1900	52	45							
2000	24-47 N	169-35 W							
2100									
2200	24-39 N	169-13 W							
2300									
2400	24-30 N	168 50	170 7	-	090 2-4	76	77		

Date 13 June Ship 172186 () Cruise No. _____
 Organization _____ Recorder _____

Sunrise: Time 0623 Position: Lat. 23 54 N, Long. 167-33 W
 Sunset: Time 1946 Position: Lat. 23-07 N, Long. 164-49 W

Miles travelled from 0000 hours to sunrise = 80

Miles travelled from sunrise to sunset = 160

Miles travelled from sunset to 2400 hours = 48

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	0547	CELESTIAL	23-54 N	167-33 W
2.	1200	RADAR	23 36 N	166-30 W
3.	2000	LORAN	23 06 N	164 46 W
4.				
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
0100						
0200	24-22 N	168-28 W				
0300						
0400	24-19 N	168-07 W				
0500						
0600	23-35 N	167-30 W	090 11	5	090 2-4	76 77
0700	23 39	167-23 W				
0800	23-37 N	167-23 W				
0900	23 44	167-15 W				
1000	23-42 N	167-07 W				
1100	23 39	166-54 W				
1200	23-36 N	166-40 W	085 10	3	085 2-4	82 77
1300	23 32	166-28 W				
1400	23-28 N	166-15 W				
1500						
1600	23-18 N	165-26 W				
1700						
1800	23-19 N	165-10 W	085 8	3	085 2-4	80 77
1900						
2000	23-06 N	164-46 W				
2100						
2200	22-58 N	164-30 W				
2300						
2400	22-51 N	163-56 W	060 10	4	050 2-4	76 77

Date 15 June Ship LT 2086 () Cruise No. _____

Organization _____ Recorder _____

Sunrise: Time 0549 Position: Lat. 21-10 N, Long. 158-07

Sunset: Time _____ Position: Lat. _____, Long. _____

Miles travelled from 0000 hours to sunrise = 54

Miles travelled from sunrise to sunset = _____

Miles travelled from sunset to 2400 hours = _____

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.				
2.				
3.				
4.				
5.				

Hourly Positions:

Time Latitude Longitude Wind Dir. Wind Sp. Wave Dir. Wave Hgt.

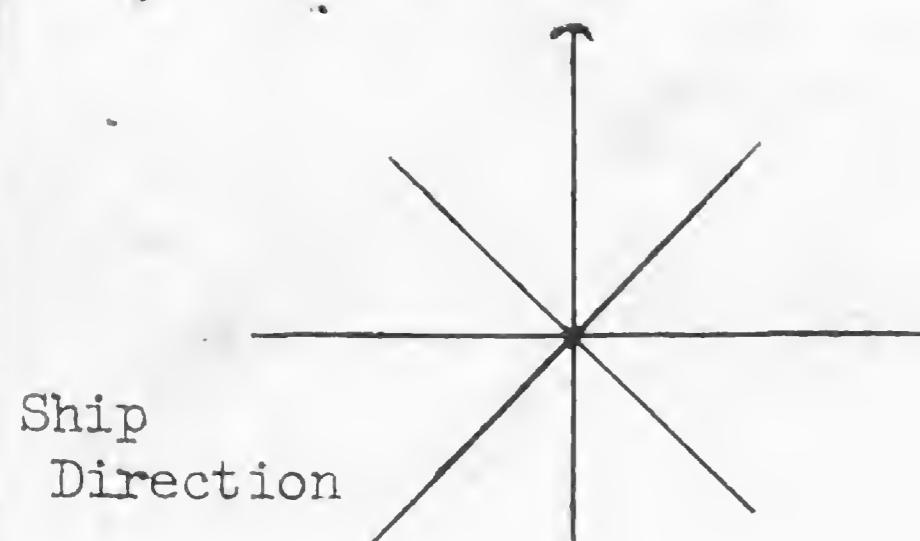
0100						
0200	<u>21-20 N</u>	<u>158-36 W</u>				
0300						
0400	<u>21-13 N</u>	<u>158-18 W</u>				
0500						
0600	<u>21-12 N</u>	<u>158-05 W</u>				
0700						
0800	<u>PEAK</u>	<u>HARBOR</u>				
0900						
1000						
1100						
1200						
1300						
1400						
1500						
1600						
1700						
1800						
1900						
2000						
2100						
2200						
2300						
2400						

2086

23 May

$$\begin{matrix} 5 & 3 \\ 1 & 3 \\ \hline 6 & 8 \end{matrix}$$

Sooty Tern	58	16	74
WT Shear.	72	16	88
RFB	3 2		3
C. Noddy	8	6	14
Pomarine Jaeger	4	2	6
Bulwer's		1	<u>1</u>
			<u>186</u>
			<u>6.08</u>



LT 2086

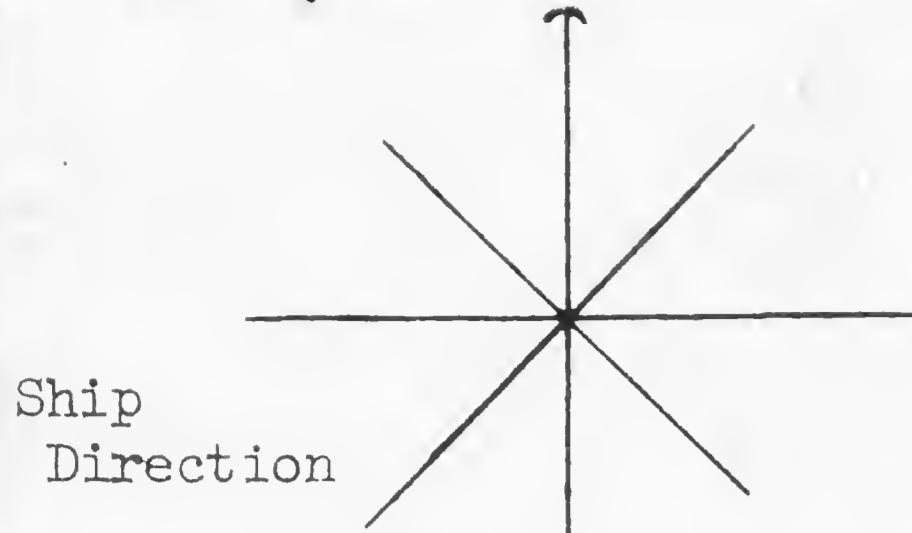
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:
B. DeLong
D. Burkhalter

SPECIMEN

or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1430					open obs. - start beyond Pearl break water
TF 1435	Sooty Tern	20 ⁺ ✓	E		
TF 1445	"	20	E		
1447	Shearwater?	1 ✓	⊗		
1454	Wedge T	1 ✓	⊗		
1456	WTS	1 ✓	⊗		dark
1457	Sooty	2	E		
1458	"	5	E		
1459	WTS	1 ✓	3		light phase
1500	Sooty	2 ✓	E		
1501	Red-F. Booby	1 ✓	E		ad
P 1503	WTS	15 ✓	E		ad
	RFB	1 ✓	E		ad
1504	C. Noddy	2 ✓	E		
1505	Pom. S.	1 ✓	E		
1506	WTS	4 ✓	⊗		
1507	WTS	1 ✓	⊗		light
1510	ST	2	E		
1512	RFB	1 ✓	E		light - ad
1513	WTS	1 ✓	E		"
1514	CN	1 ✓	E		"
1515	WTS	3 ✓	⊗		light
1520	WTS	1 ✓	⊗		"
1524	WTS	2 ✓	⊗		light
1525	ST	1 ✓	E		
1527	WTS	2 ✓	⊗		light
1529	Pom. J	1 ✓	E		
1530	WTS	1 ✓	⊗		light
1532	"	1 ✓	⊗		lt.
1537	"	1 ✓	81		"
1539	CN	3 ✓	E		"
P 1540	Boy. J	2 ✓	E		
	ST	5 ✓	E		
F 1541	WTS	30 ⁺ ✓	⊗		distant
1542	CN	1 ✓	E		
1543	WTS	1 ✓	E		lt.
1545	WTS	1 ✓	⊗		"
1546	CN	1 ✓	E		
1550	WTS	1 ✓	⊗		lt.
1551	ST	1 ✓	E		
1558	WTS	1 ✓	⊗		lt.
1600	WTS	2 ✓	⊗		4



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

B. DeLong
D. Burckhalter

Date 23 May 1967
Pg. # 2

SPECIMEN

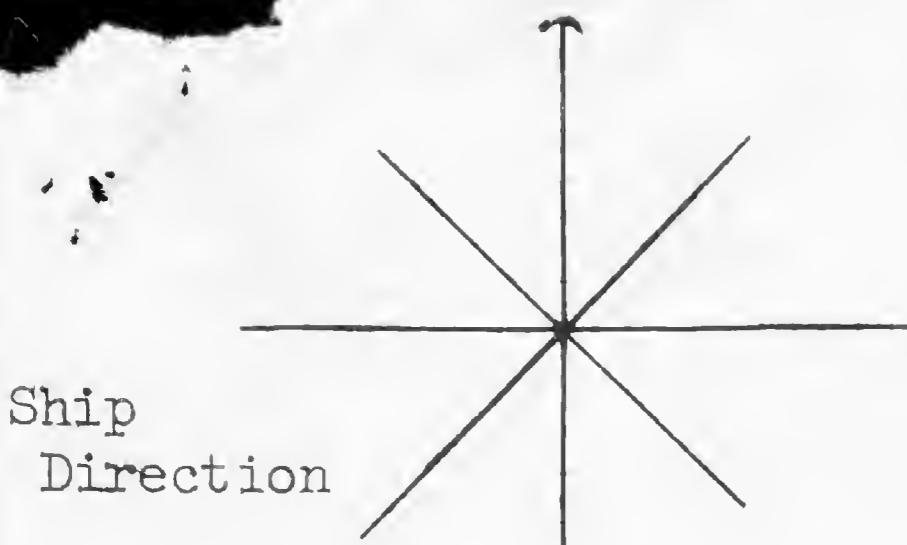
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1615	Pom J	1 ✓	E		molt flight feathers
1620	WTS	1 -	8		lt.
1621	WTS	2 -	8		dk, lt.
1630	ST	1 ✓	8		
1631	Pom J.	1 ✓	8	on H20	some molt on wing,
1635	CN	1 ✓	E		
1637	WTS	1 -	8		lt.
1641	WTS	1 -	"		lt.
1645	ST	15 +			
1648	WTS	10 -			
	CN	5 ✓			
1657	WTS	1 -	3		lt.
1700	Bulwers Petrel	1		818	
1709	Close ab.	-			S.S.

BFA		2		2		4✓
Large Pterodroma						1✓
Bulwer's Pet.	11	9	3	12	14	49✓
						3✓
Gull-b Tern	3					
W-t Shearwater	47	215	12	252	39	338✓
						1✓
Jaeger						
Sooty Tern	# 13	27	1	02		43✓
White Tern	11	4	21	3	7	46✓
						8✓
R F Boobey		5	2			
BFA						
Brown Noddy		2	3	2		7✓
Great Frigate		2	3	2		7✓
Slim Pet.		2	260	101		363✓
CI Shear			1	749		1✓
W.R.S.P.		88	267	306	1	1✓
Slim Pet.					2	2✓
					63	
						874

2086

24 May



Ship
Direction

LT2086

OBSERVERS:

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

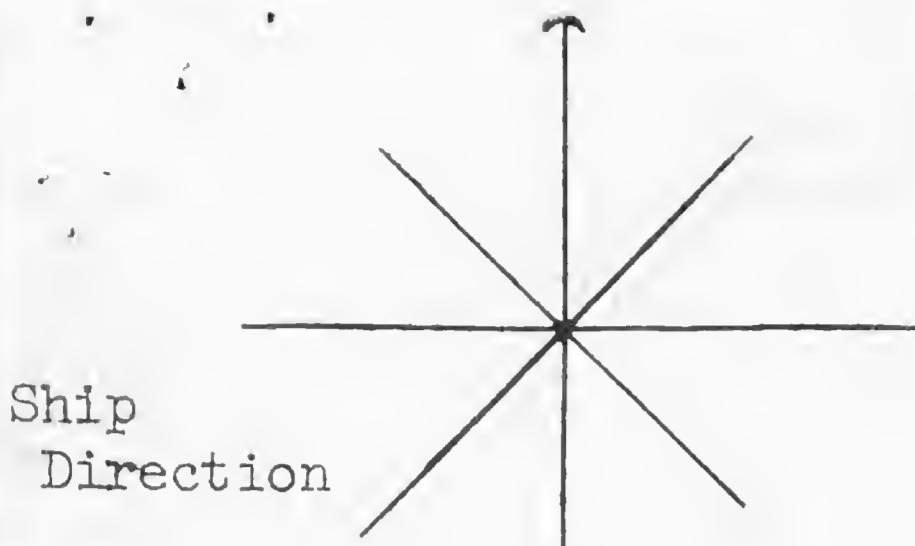
SPECIMEN

or

Date 24 May 1967
Pg. # 1

TIME SPECIES # DIR. BAND NO. REMARKS

0740						Boys in O.L.
0745	Long Pt. Rob	1 ✓	N			
0750	Long Pt. Rob Bull Petrel	1 ✓				either Sooty or Bullwink -
0805	G.-B. Tern	2 ✓				
0810	G.B.T.	2 ✓				
0812	Bulwer's Sooty	1 ✓				
0817	WTS	15+6				
0820	Sooty P. B.	1				— 1st, rest L.
0825	WTS	5 ✓				
0826	Fairy Tern	4 ✓				L.
0830	WTS	3 ✓				L.
0832	Sooty Sooty P. T.	1 ✓				L.
0837	WTS B.	1 ✓				L.
0838	Sooty S.P.	1 ✓				L.
0843	WTS	1 ✓				L.
0845	WTS	1 ✓				L.
0850	Juager?	1 ✓				
0855	Sooty Tern	2 ✓				
0900	WTS	11 ✓	E			L.
0905	Sooty S.P.	11 ✓	E			L.
0906	WTS	1 ✓				
0911	Sooty S.P.	1 ✓				
0915	WTS	11 ✓				
0923	Sooty S.P. B.	1 ✓				
0925	WTS	1 ✓				
0926	Fairy T.	1 ✓				
0928	WTS	1 ✓				
0935	"	1 ✓				L.
0937	R.F.B.	1 ✓				" L. & L. S. Ad.
0940	Bul.	2 ✓				
0945	+ Sooty S.P.	+				L.
	WTS	6 ✓				
	F. Tern	6 ✓				
	S. Tern	10 ✓				



Ship
Direction

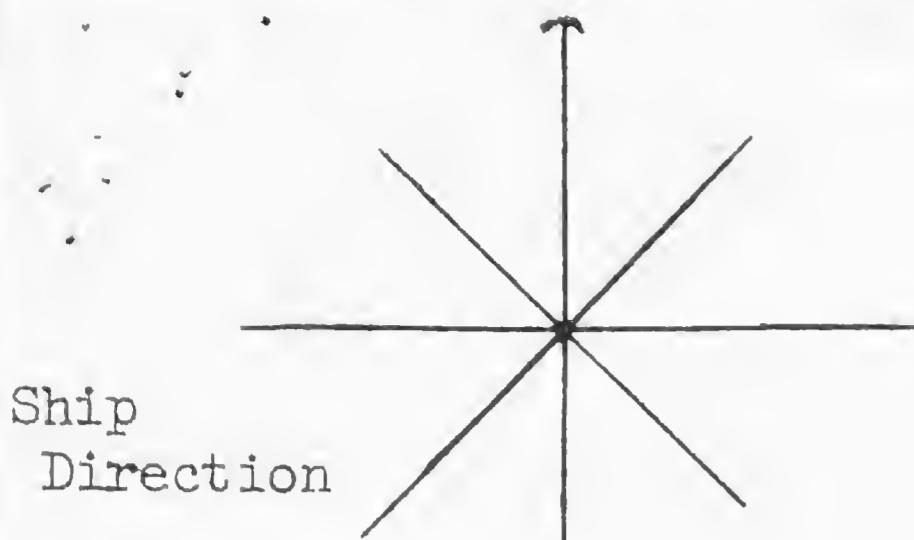
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

SPECIMEN
or

Date 24 May 1967
Pg. # 2

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0950	WTS	1 ✓	8	—	Lt.
0951	Sooty SP ^{Bul}	1 ✓	8	—	
0955	WTS	200 ±	8	—	
		25+	—	—	
	ST	—	—	—	
0958	RFB	2 ✓	on the	—	S. Ad.
0959	Pl. Shearwater	1 ✓	22	—	
1000	WTS	1 ✓	8	—	Lt.
1005	Sooty SP ^{Bul}	1 ✓	8	—	
1006	WTS	1 ✓	3	—	4
1008	SSP ^{Bul}	1 ✓	3	—	
1015	F. Tern	1 ✓	3	—	
1016	SSP ^{Bul}	1 ✓	3	—	
1020	SSP ^{Bul}	2 ✓	3	—	
1022	F. Tern	1 ✓	3	—	
1025	BFA	1 ✓	Follow	—	
1027	ST	2 ✓	8	—	
1032	WTS	1 ✓	3	—	Lt.
1033	SSP ^{Bul}	1 ✓	8	—	
1035	F. Tern	1 ✓	3	—	
1040	WTS	1 ✓	3	—	
1045	SSP ^{Bul}	1 ✓	3	—	Lt.
1050	Br. Voddy	2 ✓	8	—	Feeding
	WT SL	3 ✓	—	—	Lt.
	RF VB	3 ✓	—	—	2 Ad; 1 imm (Lt ph.)
	MF	1 ✓	—	—	
1125	Shearwater ^{Bul}	1 ✓	—	—	Bul was a Sooty Bul.
1128	White-tern	1 ✓	88	—	
1130	WTS	1 ✓	8	—	Lt.
1140	BFA	1 ✓	E	—	Large ad black - fast.
1141	Shearwater	1 ✓	E	—	
1150	WT S	6 ✓	E	—	5 Lt. 3/ DK.
1155	WTFrig.	1 ✓	—	—	



Ship
Direction

OBSERVERS:

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

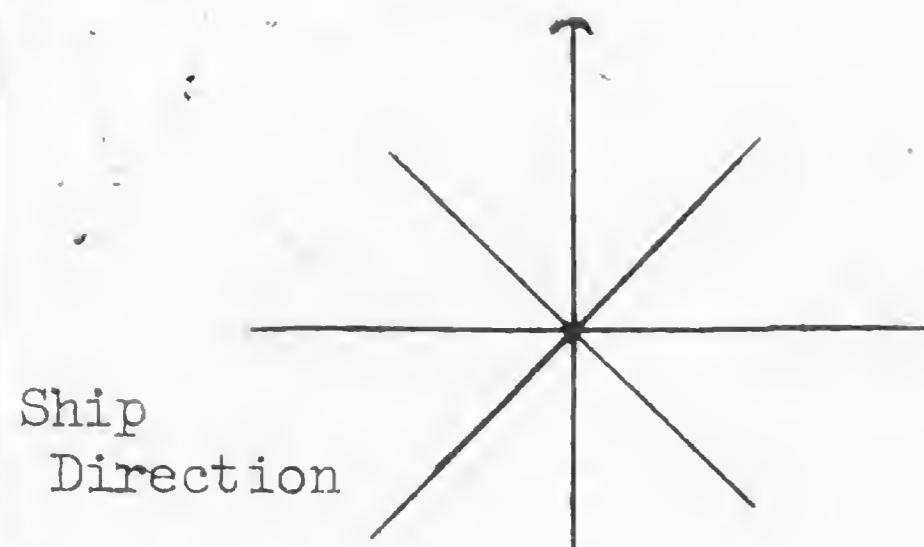
SPECIMEN

or

Date 24 May 1967
Pg. # 30

TIME SPECIES # DIR. BAND NO. REMARKS

1200	WTS	3	80	LT.
1203	F. Tern	1	80	
1205	"	1	32	
1208	"	2	33	
1210	DF	21	88	
1220	B. Noddy	2		
1225	WTS	2	NE	
FF	Shear/pets	ca. 250-50	5	chased by Frigite.
				LT.
	F. Tern	5		
1235	F. Tern	3	8	
1240	"	1	3	
1243	"	1	83	
1250	Dooty T.	1	33	
1251	WTS	1	8	LT.
1258	F. Tern	1	83	
1258	SSP Bul	1	82	
1259	F. Tern	1	82	
1300	WTS	1	3	
1301	F. Tern	2	3	LT.
1303	SSP Bul	1	8	
TF	G. Frigate	1		
	RFB	2		
	Shear/pets	10	1	
1320	F. Tern	1	33	
1322	"	1	33	
1323	C. Noddy	1	33	
1325	F. Tern	1	33	
1330	WTS	1	3	LT.
1350	Shear/pets	1	88	Sort for bulwars
1351	W. Tern	1	88	com close
1410	WT Shear	1	88	PK.
1425	CI Shear	1	6	
1431	WT Shear	1	88	LT.
1445	"	2		"



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

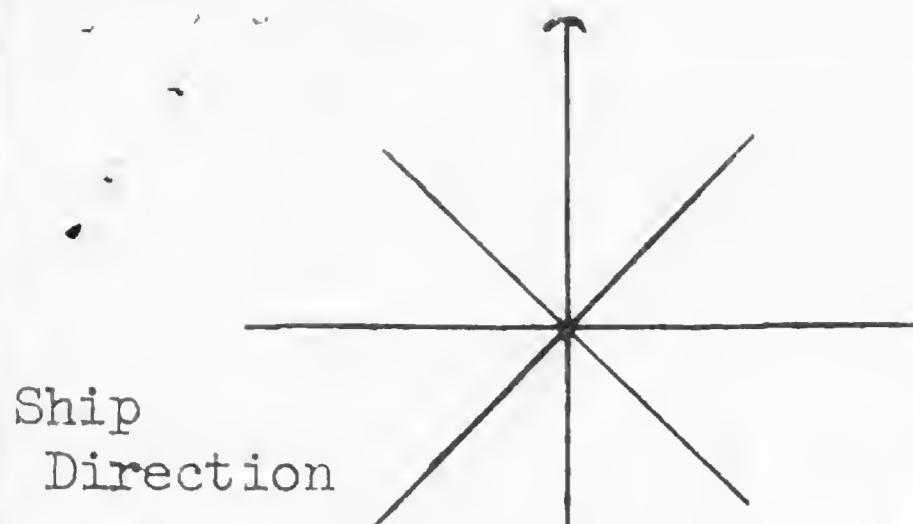
OBSERVERS:

Date 24 May 1967
Pg. # 4

SPECIMEN

or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1505	S. Tern	1	N		
1509	WTS	1	S		— Lt.
1510	SSP Bul	2	S		
1520	WTS	1	S		— Lt.
1530	WTS	1	S		— Lt.
1544	BFA	1	S		
1546	WTS	3	S		— Lt.
1548	"	2	S		
1549	"	1	S		— "
1554	"	2	S		— Lt.
FF 1555	G. Frigate	1	S		
	Birds - shearwaters	100	S		prob. wedgies
1559	Shear/pet	1	S		
1604	WTS	1	S		— Lt.
1606	BFA	1	S		
1612	WTS	1	S		— Lt.
1620	C. Noddy	1	S		
1624	WTS	2	S		— Lt.
1625	SSP Bul	1	S		
1626	" Bul	2	S		
1628	"	1	S		
1630	WTS	1	S		
1634	SSP Bul	1	S		— Lt.
1640	" Bul	2	S		
1642	WTS	1	S		
1644	WTS	2	S		— Lt.
1645	SSP Bul	1	S		
1646	WTS	1	S		— Lt.
1647	WTS	1	S		— Lt.
1648	SSP Bul	1	S		
1649	F. Tern	1	S		
1650	"	1	S		
1651	WTS	2	S		— Lt.
1654	MF	1	S		
1655	WTS	1	S		— Lt.
1657	"	1	S		— Lt.
1658	"	1	S		— Lt.
1710	sooty, tan	1	S		
1714	Fairy tern	1	S		
1716	WTS	1	S		— Lt.



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 24 May 1967
Pg. # 15

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1617	SSP ^{Blu}	1 ✓	30		
1623	WRSP	1 ✓	30		
FF 1629	F. Tern	1 ✓	30		
	SSP ^{Blu}	10 ± ✓			
7	WTS	30 ± ✓			no. dk. phase noticed
1630	SSP ^{Blu}	1 ✓	30		
1232	WTS	1 ✓			LT
1742	St ^{Blu} Pk	1 ✓	30		
1747	W-T Sh.	1 ✓			Sooty or fulvous.
1805	WTS L.	1 ✓	E		
1820	WTS L.	1 ✓	848		LT
1825	WTS	1 ✓	841		LT
1830	Sooty > Pet.	2 ✓	21		LT
1835	WTS	1 ✓	E		
			58		LT
1838	U. Tern	6 ✓	888		
1850	Stom Pet.	1 ✓			small (Larus' size) all black
1853	LT Sh.	1 ✓	841		LT
1854	"	1 ✓	868		LT
1857	Stom Pet.	1 ✓			Sooty or fulvous

Aug 20th 1 + 1

2 ✓

BFA 12 + 4

16 ✓

17th 20 + 17 + 23

65 ✓

Storm Pk 1

1 ✓

5 Lmpk 3

3 ✓

Baldwin 3 + 6

9 ✓

Early 9 + 18 + 83

110 ✓

Conn Ndy 10

10 ✓

Early 1 12 + 1

4 ✓

H. Eng 2 + 1

3 ✓

REB - 1

1 ✓

T. Eng 50 4

50

CITLm 1

1 ✓

T. Eng ap. 50

50 ✓

Widg ap 1

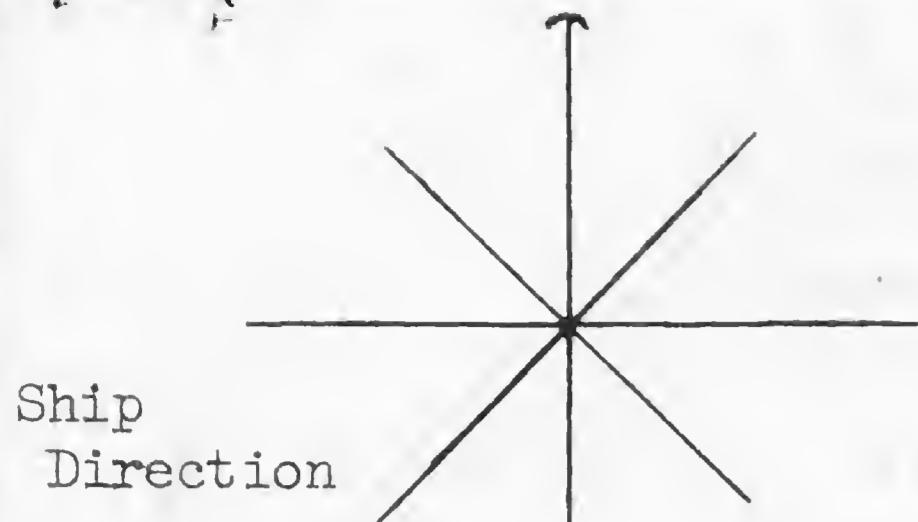
1 ✓

Eng 1

1 ✓

322

2086
25 May 1967



Ship
Direction

LT 2086

OBSERVERS:

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

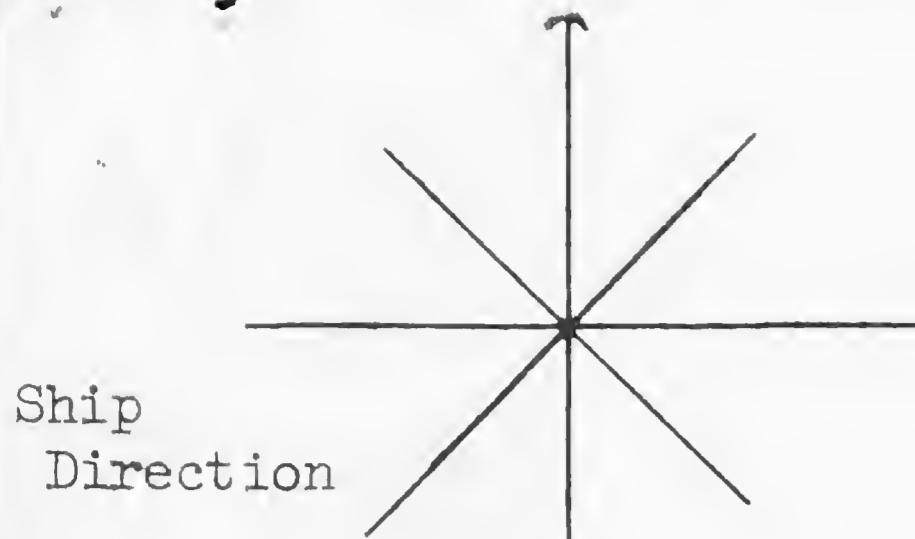
SPECIMEN

or

Date 25 May 1967
Pg. # 1

TIME SPECIES # DIR. BAND NO. REMARKS

0630					begin obs
0631	BFA	3 ✓	80		
0635	WTS	1 ✓	80		→ Lt.
0636	Sooty Tern	1 ✓	80		
0637	C. Noddy	1 ✓	80		
0640	F. Tern	1 ✓	80		
0646	ST	2 ✓	E		
0649	SP	1 ✓	E		
0650	Shear/pet	1 ✓	8		
0652	G. Frigate	1 ✓	NE		AF
0654	C. Noddy	3 ✓	NE		
0656	ST	1 ✓	E		
0702	ST	1 ✓	E		
0704	G. Frigate	1 ✓	E		AF
0715	Sooty Tern	1 ✓	80		
0716	WTS	1 ✓	E		→ Lt.
0718	Laysan Petrel	1 ✓	80		
0722	Sooty S. Petrel	1 ✓	80		
0725	Wedge Tailed	2 ✓	80		→ Lt.
0735	Shear/Pet	2 ✓	8		
0740	BFA	6 ✓		Follow 87 = 9	
0742	WTS	1 ✓	8		
0742	ST	1 ✓	8		→ Lt.
0745	WTS	2 ✓	80		→ Lt.
0747	C. Noddy	5 ✓	NE		
0750	Laysan A	1	80		
0752	WTS	2 ✓	8		→ Lt.
0755	WTS	3 ✓	8		→ Lt.
0800	WTS	2 ✓	8		→ Lt.
0805	SSP. B. Bol	1 ✓	8		
0806	WTS	1 ✓	8		→ Lt.
0807	C. Nod.	1 ✓	8		
0808	WTS	2 ✓	80		→ Lt.
0809	ST	1 ✓	80		
0816	BFA	3 ✓		now 16	
0813	SSP. B. Bol	1 ✓	80		
0814	WTS	2 ✓	80		→ Lt.
0816	WTS	1 ✓	80		→ Lt.
0819	ST	1 ✓	W		



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

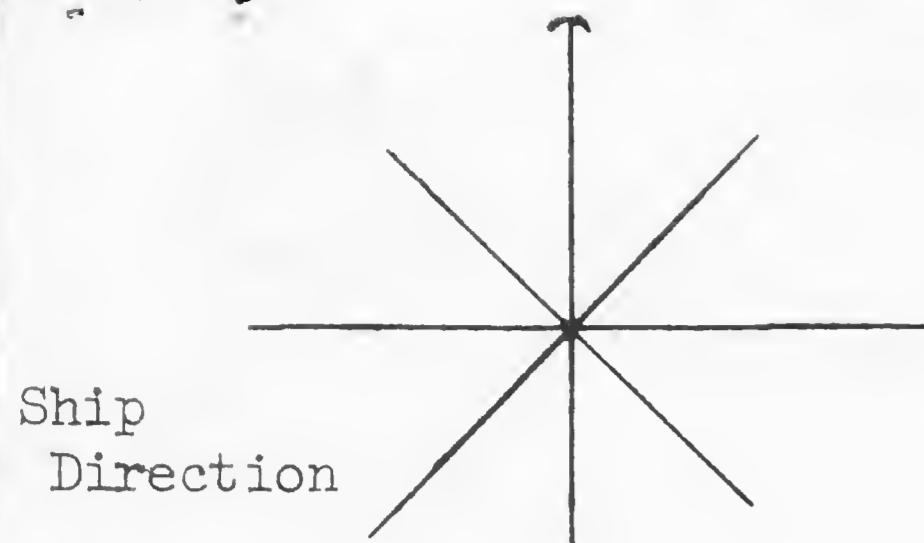
B. DeLong
D. Burckhafer

Date 25 May 1967
Pg. # 2

SPECIMEN

or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0824	WTS	3 ✓	Ø		LT.
0826	WTS	2 ✓	Ø		LT.
0829	WTS	2 ✓	Ø		LT.
0830	ST	3 ✓	Ø		
0835	Laysan A.	1 ✓			now 2
0837	SSP Bul	1 ✓	Ø		
0842	G. Frigate	1 ✓	Ø		AF
0845					
0900	Pacific B-n Porpoise	ca. 50			close obs 1/2 miles from French Frigate Shds w/young road wake of bow for 5 min.
1640					
1645	BF7	4 ✓			resume obs. 7 1/2 off F.F.S. Following
1647	F. Tern	1 ✓	Ø		
1648	WTS	1 ✓	Ø		LT.
1651	Bul	1 ✓	Ø		
1654	C. Nod	1 ✓	Ø		
1655	Bul	1 ✓	Ø		
1656	WTS	1 ✓	Ø		LT.
1700	F. Tern	1 ✓	Ø		
1701	ST	2 ✓	E		
1704	WTS	1 ✓	Ø		LT.
1705	ST	1 ✓	E		
1707	WTS	1 ✓	Ø		LT.
1711	WTS	1 ✓	Ø		LT.
1713	ST	1 ✓	S		
1718	ST	1 ✓	S		
1719	Bul	1 ✓	Ø		
1722	WTS	1 ✓	Ø		LT.
1724	Bul	1 ✓	Ø		
1840	Sooty T	3 ✓	N		
1845	Wedge T	1 ✓	N		LP
1848	Sooty T	1 ✓	N		
1800	Wedge T	1 ✓	SE		
1803	Sooty T	4 ✓	E		Adult
1804	"	3 ✓	NE		"
1810	Bulwers	Ø 1 ✓	ØØ		
1824	RFB.	1 ✓			LT; Adlt
1835	WTS	2 ✓	811		LT



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

R. DeLong
D. Bush Miller
D. Shidell

Date 25 May '61
Pg. # 3

SPECIMEN
or

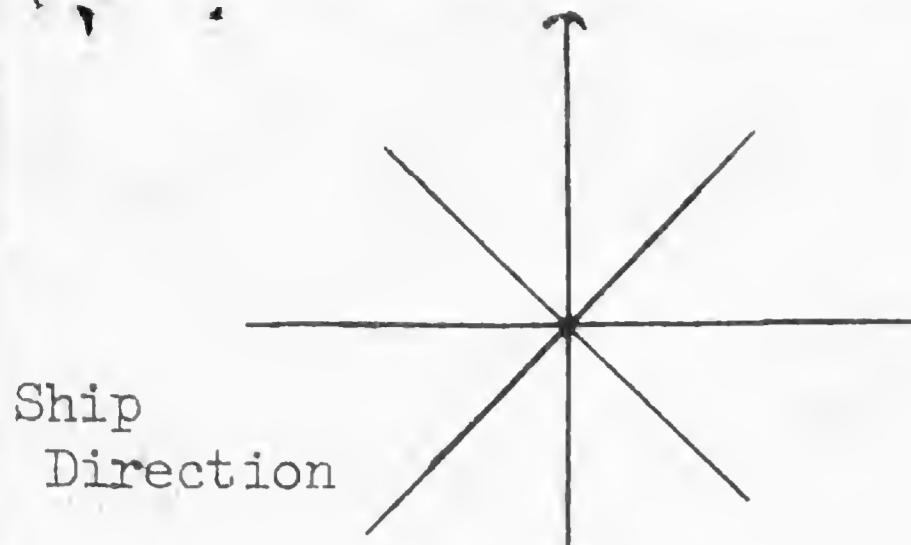
TIME SPECIES # DIR. BAND NO. REMARKS

1850	Sooty Tern	2 ✓	E	— Ad.
1853	"	4 ✓	S	"
1855	"	1 ✓	S	"
1858	Laysan	2 ✓	882	
1903	"	1 ✓	882	L + Ph.
1910	C. S. Laysan	1 ✓	881	
F 1911	Tern	50+		5 mile ahead.
1920	Noddy Sp	1 ✓	N	
1921	Sooty Tern	1 ✓	S	
FF 1928	Sooty Tern	75- 10		L+
	Laysan	25-14		
	booby sp	1 ✓		
1931	L. Tern	1		

26 May

			83
BFP - 1	- 3	4 ✓	73
1278L - 11 - 64	- 176 - 49	300 ✓	<u>562</u>
Bottom 6 - 1		7 ✓	
Bottom 28 - 162	- 308 - 22	521 ✓	
Fayfay 4 - 2 - 3		9 ✓	
Temp - 2		2 ✓	
BFB - 15		15 ✓	
MF - 4 - 4		8 ✓	
Bn. Bnby - 1		1 ✓	
RTTB - 1		1 ✓	
Bn. Notby 4		4 ✓	
Bn. Notby 2 - 26 - 1		29 ✓	
Bn. Notby 2 - 1 - 1		9 ✓	
Others - 1		1 ✓	
		906	

2086 26 map



LT 2086

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

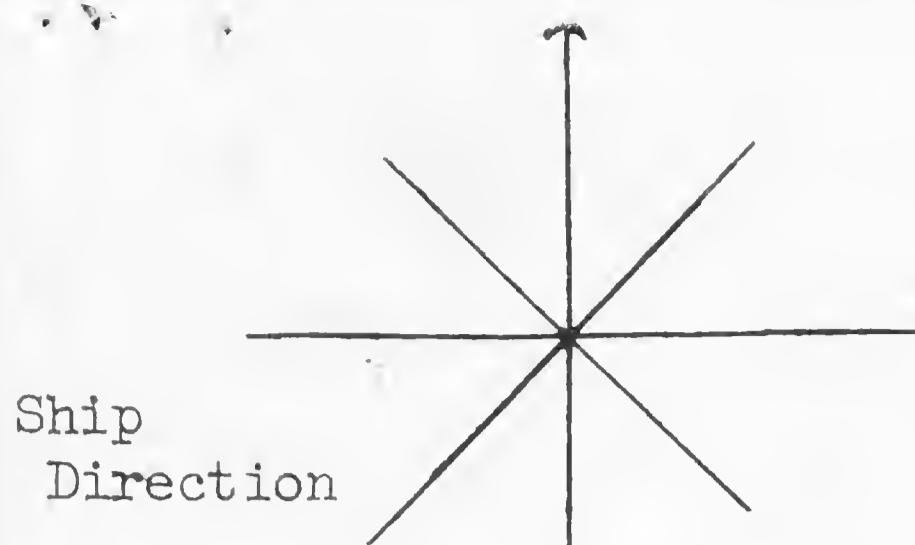
R. DeLong
D. Burckhalter
P. Stadel

Date 26 May 1967
Pg. # 1

SPECIMEN

or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0620					
0623	Wedgetail	1	NE		BP Begin Watch
0628	"	1	NE		"
0632	"	1	NE		"
0640	"	1		4	LP
0645	"	1		4	"
0648	"	1		"	"
0653	Tern	1	E		Probably Sooty
0702	Grcy-b Tern	1	E		
0708	BF B	2	E		Adult
0715	Tern	1	W		
0725	GB-B Tern	2	N		
0726	HS-Frig.	2		868	ad.
0728	WTS	1			
0730	ST	2			lt.
0735	WTS	2			
0740	BFB	2			ad
0741	ST	1			
0742	BFB	4			ad, 1 SA
0742	BB	1			
0743	GFrigate	2			
0745	BBB	1		0	ad
0746	Sooty T.	25+		00	
0747	GB-Tern	1		00	
0749	RTTB	1		00	
0749	Bl-gray Nod	1		00	
0750	G-B Tern	1		00	
0753	BFB	2		00	
0754	RTTB	1		00	
0755	BFB	4		00	
0756	f. Tern	4		00	
0757	Bl-gray N.	3		00	
0758	G-B Tern	1		00	imm.
0800					close shr. 1 1/2 mi off Gardner Pinnacles
1200					
1200	BFA	1		follow.	reopen obs. - underway
1218	WTS	1		00	lt.
1220	C. Nod.	2		00	lt.
1222	WTS	1		00	



Ship
Direction

OBSERVERS:

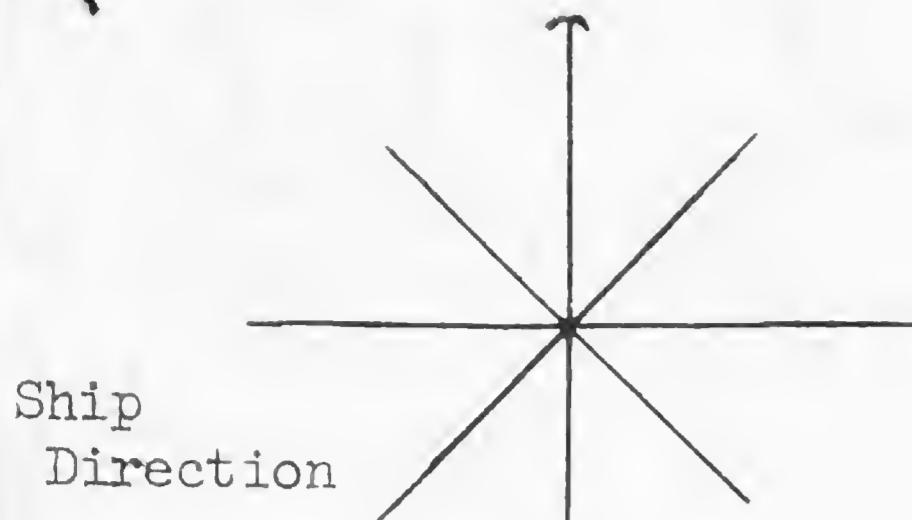
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

SPECIMEN

or

Date 26 May 1967
Pg. # 2

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1258	G-B Tern	1 ✓	SE		
1310	C Noddy	1 ✓	N		
1322	Wedgetail	1 ✓	N		LP
1337	Wedge tail	1 ✓	SSE		Lt.
1358	"	2 ✓	SSE		Lt.
1350	Wedgetail	1 ✓	SSE		Lt.
1400	"	2 ✓	8888		Circling high - wing out.
1408	Wedgetail	1 ✓	888		Lt.
1450	"	1 ✓	8888		Lt.
FF 1454	Wedgetail	35±5			
	Sooty Tern	80±10			352
1500	C Noddy	10±4 ✓			now 2
1508	BF A Lt Shear	2 ✓			
1510	C Noddies	15±4 ✓			
1509	Sooty Tern	2 ✓			
1512	Wedgetail	1 ✓	W		
1518	"	2 ✓	888		
1519	Sooty Tern	1 ✓	888		
FF 1520	Sooty Tern	75±20			
	Fairy Tern	2 ✓			
	Wedgetail	15±3 ✓			
1528	Frigate	2 ✓	888		
1530	Bulwers pett	1 ✓	SSE		
1535	Sooty Tern	2 ✓	NW		
1552	WTS	1 ✓	888		Lt.
1554	WTS	1 ✓	888		Lt.
1600	Bulwers	1 ✓			
FF 1617	Sooty T	150	E		Adults
	Wedgetail	70			♂ ♀



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

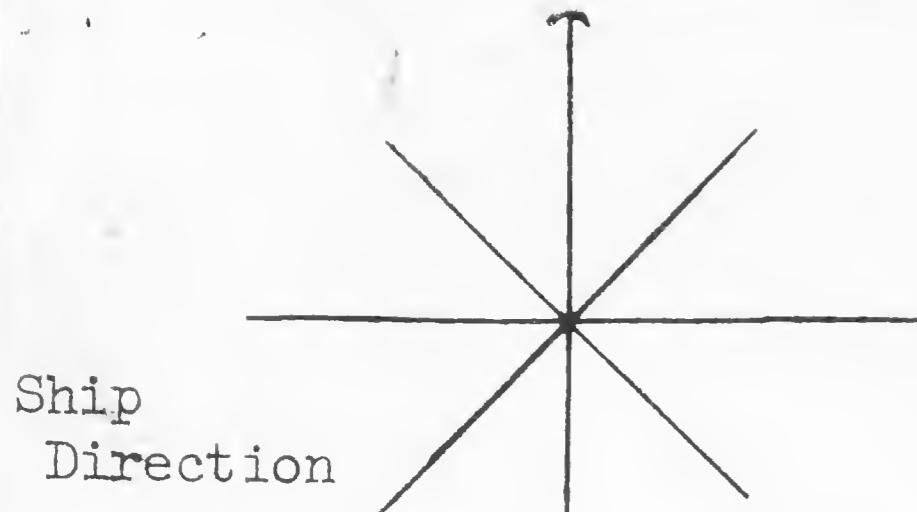
OBSERVERS:

D.L. Stadel

SPECIMEN
or

Date 26 May
Pg. # 3

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
TF 1620	Sooty T Wedge-tail	230 ✓			Large flock in two groups. Terns were seen diving to water & cut it on water but no feeding was observed.
		110 ✓			Appeared to be a broken up feeding flock.
1630	Wedge-tail	1 ✓	N		
1635	C. Noddy	1 ✓	Ø		
1640	WTS	1 ✓	Ø		— Lt.
1645	ST	1 ✓	Ø		
1646	Wedge-tail	2 ✓	E		LP
TF 1647		7 ✓	E		
1650	WTS	1 ✓	Ø		— Lt.
1655	"	1 ✓	Ø		— Lt.
1658	"	1 ✓	NE		
1659	"	4 ✓	SS		— Lt.
1710	Jaeger	1 ✓	Ø		On Sub Adult, First phase
FF 1720	Sooty T Wedge-tail Fairy T	70 ± 40 ±	Ø		Adults. WTS all Light phase. No large fish breaking surface
1735	WTS	1 ✓	Ø		— Lt.
1736	ST	4 ✓	E		
1737	WTS	1 ✓	Ø		— Lt
1750	BFA			now 5	
1755	WTS	1 ✓	Ø		— Lt.
1759	WTS	4 ✓	Ø		— Lt
1800	ST	1 ✓	Ø		
1805	WTS	1 ✓	Ø		— Lt.
1810	Sooty tern	2 ✓	E		St.
1820	Bulwer's Pet.	1 ✓	N		
1826	BFA	7 ✓			Total of 4 following also there have been for most 7 days.



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

DeLong
Bushnell
S. Tadel

SPECIMEN
or

Date 26 May '67
Pg. # 4

TIME SPECIES # DIR. BAND NO. REMARKS

1830	W. + Shear.	1 ✓	888	—	Lt. Phase.
1835	"	2 ✓	888	—	"
FF 1843	Sooty Tern	20 ± 5 ✓	—	—	ad.
	Wedge-tail	30 ± 5 ✓	—	—	Lt
	Fairy Tern	3 ✓	—	—	—
1855	W. + T. Sh.	2 ✓	888	—	Lt
1858	"	1 ✓	N	—	Lt
1900	Sooty Tern	1 ✓	N	—	ad.
1901	W. + Shear	3 ✓	S	—	Lt Ph.
1915	Sooty T	1 ✓	N	—	—
1935	Sooty T	1 ✓	N	—	—
"	Wedge-tail	1 ✓	N	—	Lt
1940	Bulwers	1 ✓	N	—	—
1946	Wedge-tail	1 ✓	N	—	Lt
"	"	1 ✓	W	—	"
1953	"	1 ✓	N	—	"
"	"	1 ✓	S	—	"
2000	"	1 ✓	SW	—	"
"	"	1 ✓	SW	—	"
2001	"	1 ✓	SW	—	"
2003	"	1 ✓	SW	—	"
2005	"	1 ✓	SW	—	"

29 May

BFA - 5 - 4 - 1

10 ✓

Lay A - 1 - 2 - 3

6 ✓

Wt. 3 km = 21 - 52 - 27 - 166 - 22 298 ✓

Stem up - 3

3 ✓

BEP - 3 - 5 - 13 - 13 - 4

38 ✓

Surf. off 2 - 6 1 - 1

64 ✓

BFB - 1 - 1

2 ✓

Ridge - 1 - 2 - 2 - 3

8 ✓

MBT - 1 - 2

2 ✓

Fayle - - - 2

2 ✓

Re. Noddy 15

15 ✓

Re. Freg - 2

2 ✓

Small Plover 1

1 ✓

5 km/s 6

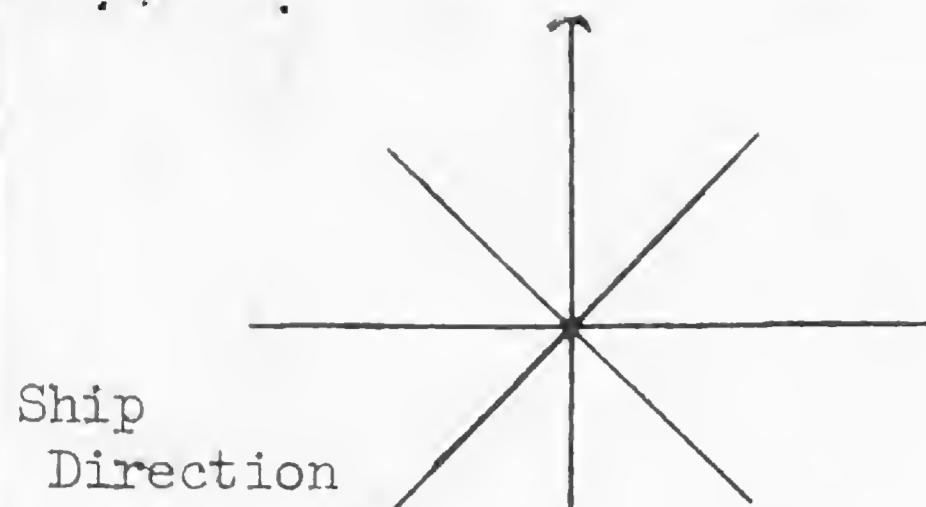
6 ✓

RTTB - 1 -

1

458

2086



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

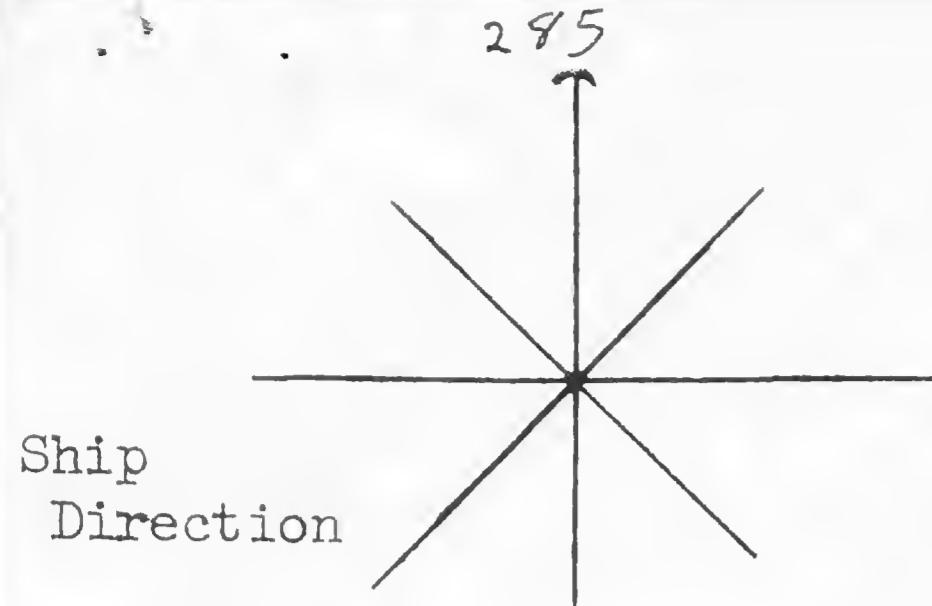
OBSERVERS:

DeLong, Stadel
Burkhardt

SPECIMEN
or

Date 27 May '67
Pg. # 1

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0630					begin obs.
0630	WTSL	1	✓	SSE	LT Ph.
0637	"	1	✓	SE	"
0640					
0642	WTSL	1			Sunrise
0643	haysan Alb.	1	✓	SSE	LT. 1 following ship
0644	B.F. Albat.	2	✓		Total 2 following ship
0650					Today Th 2087 is 4 miles to our starboard and the 2081 has been dropped one mile off the aft port quarter. This is reducing possible effect on birds seen.
0702	BFA	3	✓		Total 5 flying about ship.
0704	WTSL	1	✓	SSE	LT.
0708	Sterna sp.	3	✓	N	
0710	WTSL	4	✓	NE	LT.
0711	"	4	✓	"	"
0712	"	4	✓	"	"
0713	"	4	✓	"	"
0716	Bonin Is	1	✓	N	
" 5	"	1	✓	N	
0718	haysan A	1	all		
0719	Bonin	1	✓	N	
" 7	Wedge-tail	1	✓	N	
0720	Sooty	2	✓	N	



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

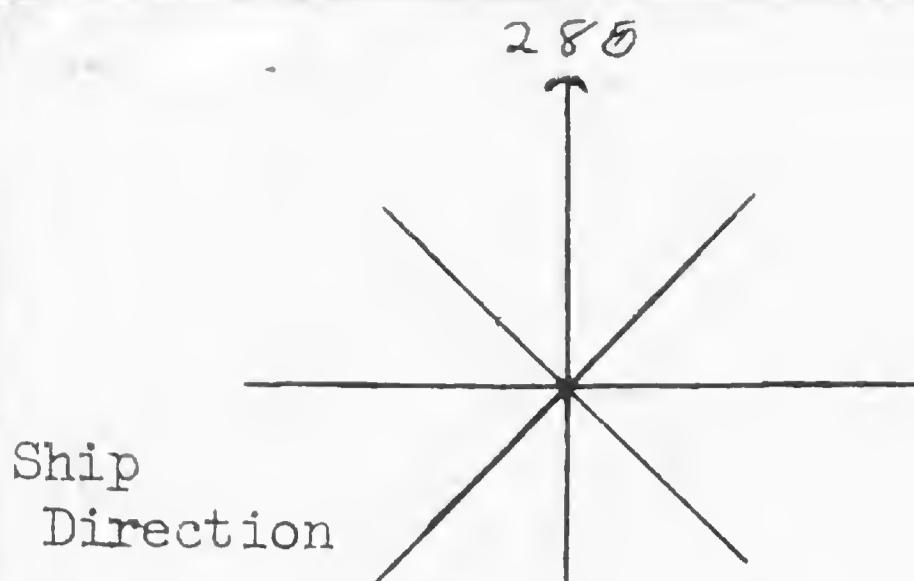
DC Stadel

Date 27 May
Pg. # 2

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

0719	BFRB	1✓	N	Adult
0720	Bonin Is	1✓	N	
"	Wedge-tail	3✓	N	LP
0721	"	4✓	N	
0722	Laysan A	2✓	ob	
0723	Wedge-tail	3✓	N	
0725	"	2✓	N	
0728	"	2✓	N	
"	"	3✓	N	↓
0730	Bonin	1✓	○	
0732	Wedge-tail	3✓	N	LP
0735	"	2✓	N	"
0737	Laysan	2	N	
"	Wedge-tail	4✓	N	LP
0739	"	4✓	N	
0741	Bonin	1✓	N	
0743	Wedge-tail	4✓	N	
"	"	2✓	N	
0747	"	2✓	N	
"	Bonin	1✓	N	
0749	Wedge-tail	2✓	N	
0752	"	2✓	N	
"	Bonin	1✓	N	
0757	Wedge-tail	3✓	N	
"	Bulwers	1	N	
"	Wedge-tail	3✓		
0808	" "	4✓	N	



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

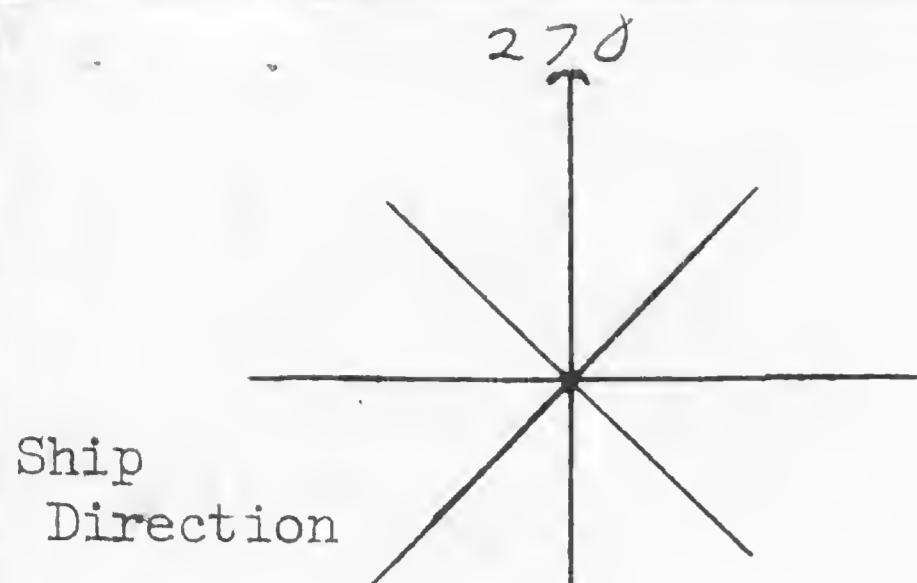
DL Stadel
D Burkhalter

Date 27 May
Pg. # 3

SPECIMEN

or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0808	Wedge-tail	3 ✓	N		
0812	"	3 ✓	N		
0813	Bonin	1 ✓	S		
0814	Wedge-tail	2 ✓	N		
0815	"	3 ✓	N		
0816	BFA	3	SE		
0825	Bonin	1 ✓	SE		
0828	"	1 ✓	SE		
0833	WTS	1 ✓	SE		LC.
0835	Bul.	1 ✓	SE		
0836	Laysan	1 ✓	SE		now 3
0841	BIP	1 ✓	SE		
0842	WTS	1 ✓	SE		LT.
0843	GB Tern	2 ✓	SE		ad.
0846	WTS	1 ✓	SE		LT.
0850	BFA	4 ✓			now 9
0854	Bul	1 ✓	SE		LT.
0859	WTS	2 ✓	SE		LT.
0901	BIP	1 ✓	SE		
0903	WTS	1 ✓	SE		LT.
0905	BIP	1 ✓	SE		
0906	WTS	1 ✓	SE		LT.
0908	WTS	1 ✓	SE		LT
0910	WTS	1 ✓	SE		LT
0913	BIP	1 ✓	SE		
0914	BIP	1 ✓	SE		
0922	BIP	1 ✓	SE		
0935	WTS	1 ✓	SE		LT.
0942	WTS	1 ✓	SE		LT.
0945	BFB	1 ✓	E		ad.
0948	WTS	1 ✓	SE		LT.
0952	WTS	1 ✓	SE		LT.
0954	"	1 ✓	S		LT
0957	"	1 ✓	S		"
1009	Bonin	1 ✓	N		
1012	"	1 ✓	S		
1013	"	1 ✓	S		
1016	Wedge-tail	1 ✓	S		
1018	Bonin Is	1 ✓	N		



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

DC S fade/

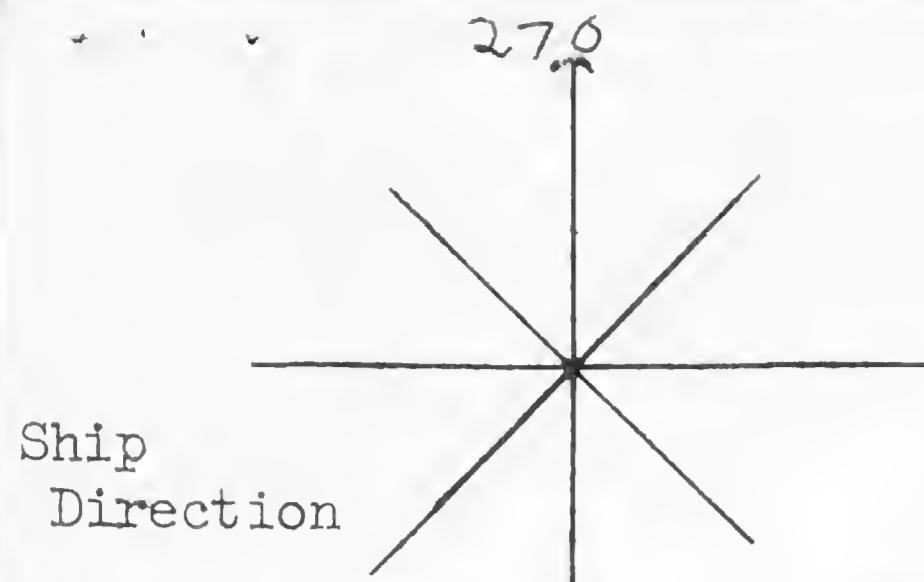
R. Rehony

Date 27 May 67
Pg. # 4

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

1022	Bonin	2 ✓	05	
1023	"	1 ✓	N	
1044	Wedgetail	2 ✓	00	Lt
1055	"	1 ✓	N	"
1100	Laysan Albatross	1 ✓	N	not following
1104	Blk-F. Pet.	1	S	"
1113	W-T Shear	1 ✓	S	Lt
1117	Sooty Tern	3 ✓	SW	
1128	Bonin Isl.	2 ✓	S	
1135	Bulwer's Pet.	1 ✓	888	
FK	1140	W-T Shear	150 ± 20	
		Sooty Tern	50 ± 10	
		Blk Pet.	5 ✓	
		Frig Tern	2 ✓	
		2. Noddy	15 ✓	
		Gr. Frig	2 ✓	Ad. ♂ ↗
		Laysan alb.	2 ✓	
	Bon. Pet.	1 ✓		
1155	WTS	1 ✓	0	Lt.
1158	BIP	1 ✓	0	
1203	BIP	1 ✓	0	
1205	WTS	1 ✓	0	Lt.
1210	Bul	1 ✓	0	
1212	ST	3 ✓	0	ads.
1217	ST	2 ✓	0	ads.
1219	ST	1 ✓	N	ads.
1220	ST	2 ✓	0	ads.
1230	WTS	1 ✓	0	Lt.
1233	WTS	2 ✓	0	Lt.
1237	WTS	2 ✓	0	Lt.
1239	WTS	1 ✓	0	Lt.
1250	WTS	2 ✓	0	Lt.
1255	WTS	1 ✓	0	Lt.
1300	Blk Pet.	1 ✓	888	patch behind eye?



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

DeLong
Burkholder
Stadel

SPECIMEN

or

Date 27 May
Pg. # 5

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1320	Pterodroma small.	1 ✓	S		
1325	Shear pet	~ ✓	SE		Bonin or Jodogai.
1352	W-t Shear.	1 ✓			LT.
1410	B-I Petrel	1 ✓	8888		
1420	Bonin Ts	1 ✓	N		
1500	"	1 ✓	S		
1520	WT. Sh	1 ✓	N		LT
1550	"	1 ✓	N		LT
1555	Bul	1 ✓	8		
1607	WTS	1 ✓	8		LT.
1608	Bul	1 ✓	8		
1618	WTS	1 ✓	8		LT.
1623	WTS	1 ✓	8		
1624	ST	1 ✓	S		ad.
1630	WTS	1 ✓	8		LT
1631	Shear/Pet	3 ✓	E		
1633	Shear/Pet	1 ✓	8		
1644	Bul.	1 ✓	8		
1708	RTTB	1 ✓	E		
1716	BIP	1 ✓	8		
1718	WTS	1 ✓	8		LT.
1720	WTS	1 ✓	8		LT.
1723	WTS	1 ✓	8		LT
1740	WTS	1 ✓	N		
1741					20 ± BFA following
1752	WTS	1 ✓	88		
1859	"	2 ✓	88		
1830	WTS	2 ✓	8		LT.
1843	11	1 ✓	88		"
1903	"	1 ✓	88		"
1915	"	1 ✓	88		"
1928	"	2 ✓	S		"
1953	"	1 ✓	SE		"
2010					Stop

22 May 1962

86

LA - 1

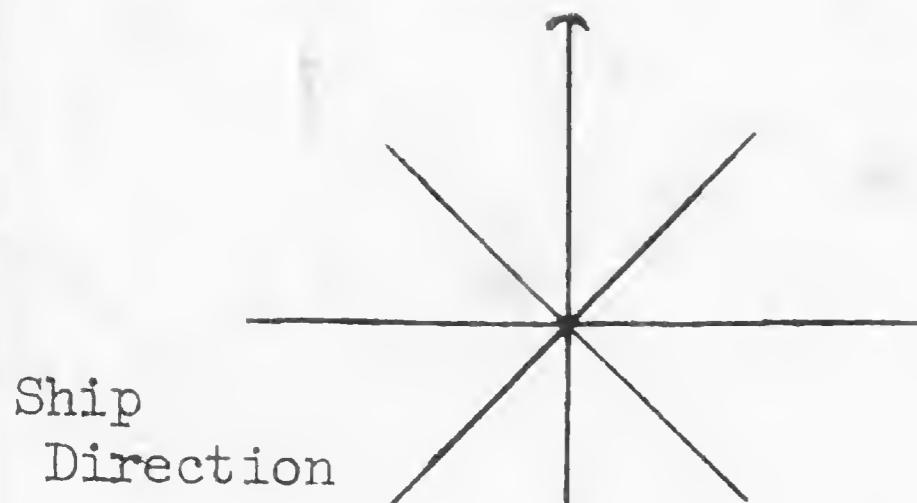
BFA - 3

ST 21

LTS 8

RT 011

44



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

R. DeLong
D. Burkhalter
P. Stadel

Date 28 May 1967
Pg. # 1

SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

0645					Begin
0645	BFA	1	✓	8	
0652	ST	1		E	ad.
0658	ST	1		E	ad.
0700	Laysan A	1	✓	8	
0706	WTS	1	✓	8	
0709	WTS	1	✓	8	
0710	ST	1	✓	8	
0712	WTS	1	✓	8	
0713	ST	1	✓	E	ad.
0716	WTS	1	✓	8	
TF 0718	Ruddy Turnstone	5	✓	E	estimated species
0719	WTS	3	✓	8	
TF 0720	R. Turnstone	6	✓	E	estimated species
0721	ST	1	✓	8	ad.
0724	ST ST	1	✓	8	ad.
0725	ST	2	✓	8	ad.
0730	ST	1	✓	E	ad.
0732	ST	2	✓	8	ad.
0734	ST	4	✓	8	ad.
0735	WTS	1	✓	8	ad.
0737	ST	2	✓	8	ad.
0738	ST	4	✓	E	ad.
0740					cease obs. ca 10 mi from St. Island birds all over of all kinds

1292

LA 2

2 (1) 2 ✓

BFA 2 - 4

6 (6) 6 ✓

105 43 - 212 - 49 - 18

324 + 57 = 381 ✓

BIR 2 - 5

7 7 ✓

Boobies 51 - 36 - 3

110 + 99 = 209 ✓

BAT 6

6 + 1 = 7 ✓

Frigate 3 - 1

4 4 ✓

Bulwers 1 - 1

2 2 ✓

R. Noddy 1

1 1 ✓

RF 2 - 1

3 + 1 = 4 ✓

Imm. Frigate - 1

1 1 ✓

RTTB

466 1 ✓

RFB

3 ✓

Ruddy Turnstone

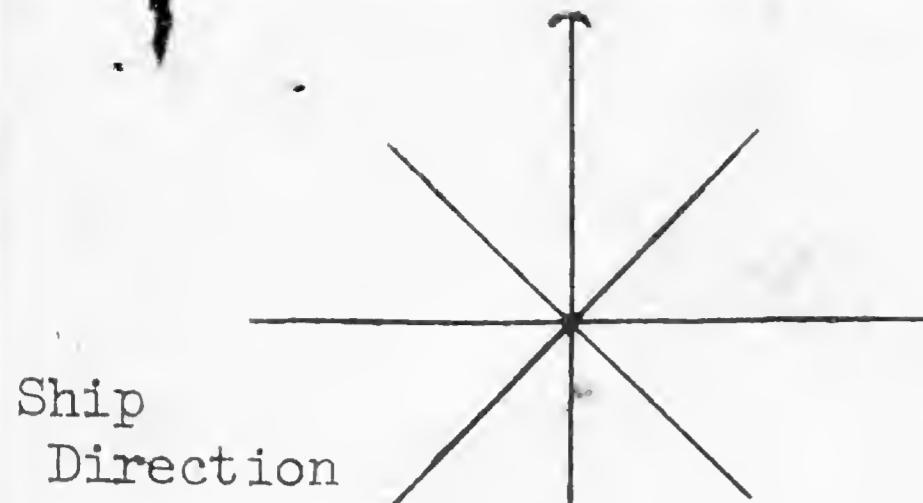
1 ✓

Hnt

2 ✓

Total
ducks 86 { 87

631



Ship
Direction

OBSERVERS:

LT 2086
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

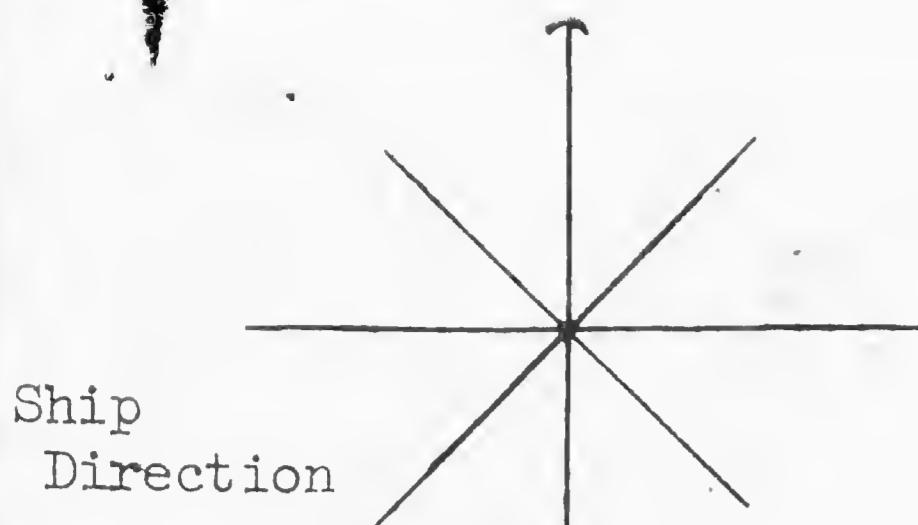
SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

Date 12 June 1967
Pg. # 1

1245	—				begin obs.
1245	WTS	2✓	8		Lt
1247	"	3✓	8		Lt.
1248	Laysan A.	2✓	8		
1249	BFA	2✓	8		
TF 1250	Sooty T.	8✓	W		ad.
1251	BIP	1✓	8		
1300	WTS	2✓	8		Lt.
1304	WTS	3✓	8		Lt.
1306	"	4✓	8		Lt.
1308	"	3✓	8		Lt.
1310	ST	4✓	W		ad
1311	BIP	1✓	8		
1315	GB Tern	1✓	E		
1316	WTS	3✓	8		Lt.
TF 1320	ST	5✓	W		ad
1323	Fairy T.	1✓	8		
1325	"	2✓	8		
1327	GB Tern	1✓	8		
1330	WTS	3✓	8		Lt.
1345	WTS	1✓	8		Lt.
1352	"	4✓	8		Lt.
1405	ST	2✓	W		
1406	Bul.	1✓	8		ad.
1407	WTS	1✓	8		Lt.
1420	"	3✓	8		Lt.
1424	"	2✓	8		Lt.
1427	"	3✓	8		Lt.
1434	"	3✓	8		"
1440	GBT	3✓	E		
1455	WTS	1✓	8		Lt.
1504	GBT	1✓	8		
1505	WTS	1✓	8		Lt.
1511	ST	2✓	W		ad.
1515	WTS	1✓	8		Lt.
1517	ST	3✓	W		ad.
FF 1522	HF	2✓			
	Sooty Tern	25✓	8		
	Wedge-tailed Shear	2✓	8		Lt
1525	Sooty Tern	2✓	N		
1526	Br. Noddy	1✓	N		



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Bachelder

De Long

Stoddard

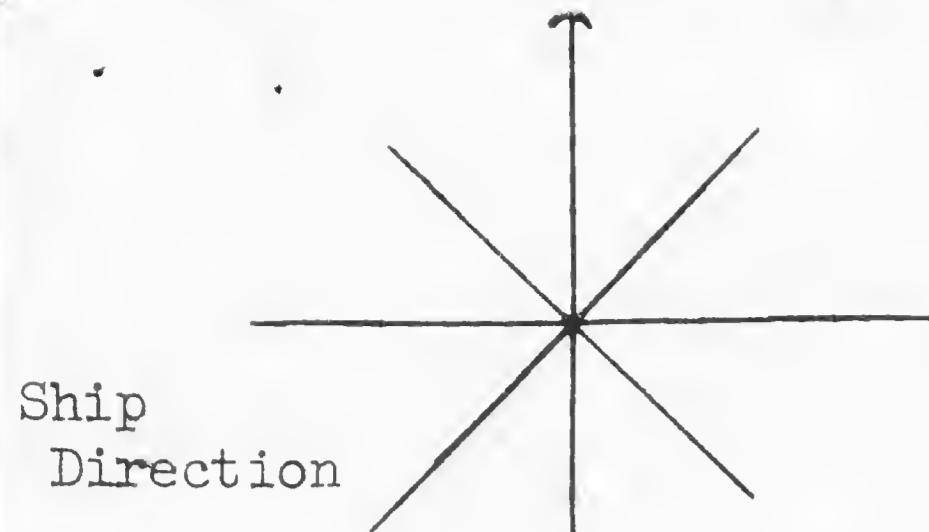
Date 12 June 1967
Pg. # 2

SPECIMEN

or

DIR. BAND NO. REMARKS

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1535	sooty tern	2 ✓	W		
1536	WT S Lm	1 ✓	N		LT
1540	Fairy tern	1 ✓	SW		
1545	WT S Lm	2 ✓	SW		LT
1550	WT S Lm	5 ✓	SW		LT
1555	WT S	1 ✓	SW		LT
1555	"	1 ✓	"		"
"	"	1 ✓	"		"
1558	"	1 ✓	"		"
1558	Sooty T	2 ✓	NW		Adults.
1602	Frigate	1 ✓	NE		
1605	Wedge T	1 ✓	SW		LT
"	"	1 ✓	SW		"
1605	"	1 ✓	NW		"
1610	"	1 ✓	SW		"
1615	"	1 ✓	SW		"
1618	"	1 ✓	W		"
1620	"	1 ✓	SW		"
23	"	1 ✓	"		"
25	"	1 ✓	"		"
28	"	1 ✓	"		"
1630	Sooty T	1 ✓	NW		
FP 1638	WT S	180 ±	SE		Feeding - WT S landing on water
	Sooty T	50 ±			
1642	WT S	3 ✓	NE		
1647	"	4 ✓	"		
1650	"	2 ✓	"		
1655	"	1 ✓	"		
1655	Sooty T	1 ✓	NW		
1657	Juan Fernandez ?	1 ✓	NE		- Shear foot



Ship
Direction

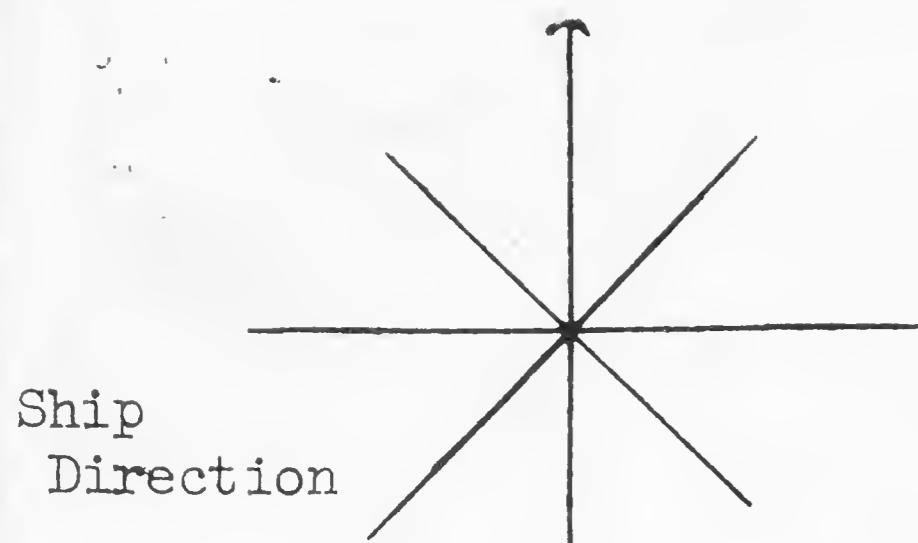
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 12 June
Pg. # 3

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1600	WTS	1✓	NE		LT
1702	"	2✓	"		
1705	"	3✓	Y		
1707	"	1✓	Y		
1710	"	2✓	W		
1715	"	2✓	W		
1717	"	1✓	"		
1720	"	1✓	"		
1725	"	1✓	"		
1730	"	3✓	"		
1733	"	2✓	W		
1737	"	1✓	"		
1740	"	3✓	"		
1745	"	1✓	Y		
1745	Bulwers	1✓	S		
1800	WTS	1✓	SE		LT.
1810	"	2✓	"		
1812	"	1✓	"		"
1816	"	1✓	"		"
1821	"	1✓	"		"
1822	ST	2✓	W		
1825	BIP	2✓			ad.
	WTS - LT.	4✓			} on H ₂ O & no show in the sky = feeding
	BFA	4✓			
1829	WTS	2✓	SE		LT.
1835	"	2✓	SE		
1839	BIP	1✓	SE		
1840	"	1✓	SE		
1843	WTS	1✓	SE		LT.
1845	BIP	1✓	SE		
1847	WTS	2✓	SE		LT.
1852	"	2✓	"		"
1856	"	1✓	"		"
1900	"	3✓	"		"
1901	sooty fr	1✓	W		
1910	WTS	1✓	SE		LT.



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

SPECIMEN

or

Date 12 Jan
Pg. # 34

TIME SPECIES # DIR. BAND NO. REMARKS

1901	WTSL.	5 ✓	888		Lt
1910	"	2 ✓	"		"
1920	"	7 ✓	"		"
1940	"	2 ✓	"		"
1950	"	2 ✓	"		
2009	-				55

139 m

BFB - 1 - 1

2 2 ✓

WIL - 15 - 13

28 + 10 = 38 ✓

RFB - 1 - 1

2 + 3 5 ✓

Salt + 21 - 34

55 + 22 = 77 ✓

RFB - 4

4 4 ✓

2.0 T - 2 - 5

7 + 2 9 ✓

By Nothing - 5

5 5 ✓

AF 1

1 + 1 2 ✓

SKW - 1

1 + 1 2 ✓

BFB 1

1 + 2 3 ✓

BEP 1

1 1 ✓

107

Newells

1 ✓

RFB

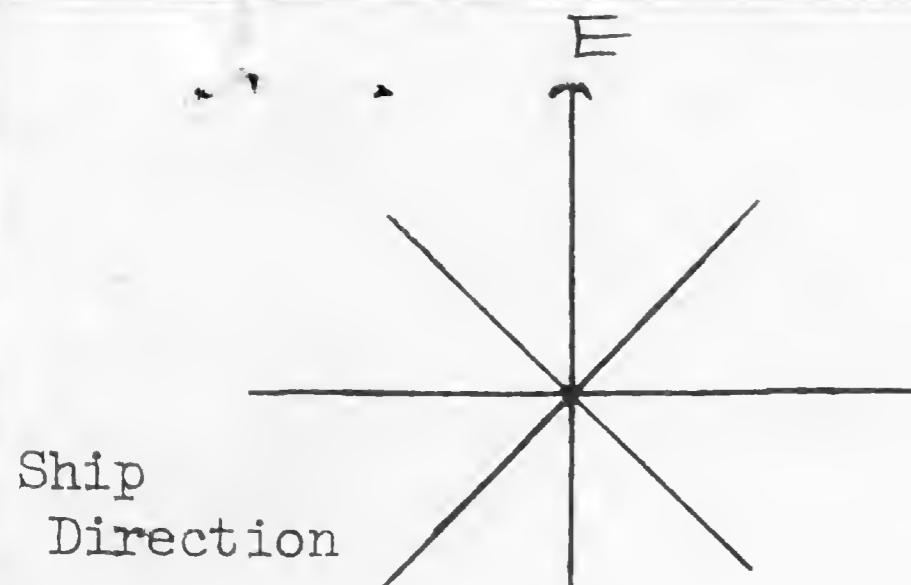
2 ✓ Ad. L.

HNT

1

152

day total
86882



Ship
Direction

OBSERVERS:

Burckhalter
DeLong
Stadel

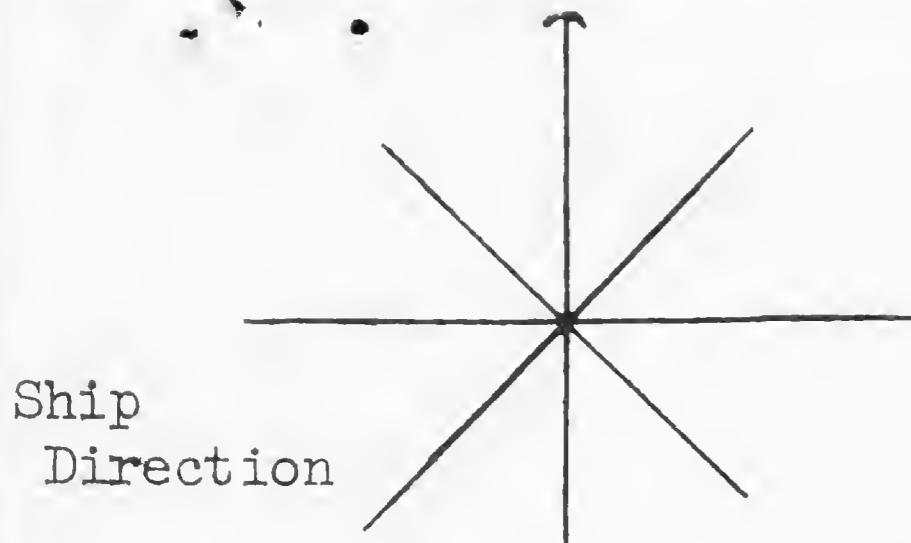
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

SPECIMEN

or

Date 13 June 1967
Pg. # 1

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0730					Bogus obs.
0740	Sooty T.	3 ✓	E		ad.
0748	"	2 ✓	E		"
0749	WTS	2 ✓	8		
0800	WTS	1 ✓	8		L+
0805	"	1 ✓	8		"
0806	ST	1 ✓	8		
0810	RTTB	1 ✓	E		ad
0814	ST	1 ✓	8		ad.
0844	Sooty T.	1 ✓	SW		"
0845	"	1 ✓	"		"
0845	Bulwers	1 ✓	S		
0846	RTTB	2 ✓	E		Ad
"	BF A	1 ✓	888		
0855	WTS	1 ✓	N		L+
0919	Sooty T	1 ✓	E		Ad
0921	WTS	1 ✓	88		L+
0927	Sooty T	1 ✓	88		Ad
0935	"	1 ✓	888		"
"	RTTB	1 ✓	N		Ad
0937	Sooty T	1 ✓	88		Ad
"	WTS	1 ✓	88		L+
0943	WTS	3 ✓	N		"
0950	Sooty T	1 ✓	888		Ad
0955	WTS	1 ✓	N		L+
1020	"	1 ✓	88		"
1025	"	2 ✓	888		"
1030	St-b Tern	2 ✓	888		ad.
1040	Sooty Tern	2 ✓			
1041	Wedge-tail	1 ✓	E		
1048	Sooty Tern	3 ✓	88		L+
1055	"	2 ✓	NE		= Ad - found F.F.
					= " "



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 13 June
Pg. # 2

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1105	BFA	1 ✓	SSE		Seen near feeding flock and counts ship
FF 1108	Sooty Tern	2 ✓			
	G-B. Tern	5 ✓			
	WTS	4 ✓			
1115	WTSherm	1 ✓		N	
1117	Br. Noddy	1 ✓		NE	
1122	WTS	1 ✓	SSE		LT
1125	B F	1 ✓		818	
1127	WTS	1 ✓		818	LT
1130	"	2 ✓		818	LT
1137	"	1 ✓		"	"
1147	"	2 ✓		"	"
1150	"	1 ✓		"	"
1155	C. Noddy	4 ✓		N	
1157	ST	4 ✓		N	
1158	Bulwer's	1 ✓		8	ad
1201	ST	1 ✓		W	ad.
1207	SKua	1 ✓		N	Reliability of 2. We are aware of La Perouse Rimicler R.F. The bird matches only the descriptions given. It was all dark reflecting only the white in the wings
1211	Sooty Tern	1 ✓		N	
1215	Sooty Tern	2 ✓		N	
1226	BFB	1 ✓		N	
1231	BIP	1 ✓		8	
1256	ST	1 ✓		8	ad.
1300					as obs. Taken by the 2087

Date 14 June Ship LT 2086 () Cruise No. _____

Organization _____ Recorder _____

Sunrise: Time 0606 Position: Lat. 22-24N, Long. 163-45W

Sunset: Time 1923 Position: Lat. 21-39N, Long. 159-57W

Miles travelled from 0000 hours to sunrise = 73

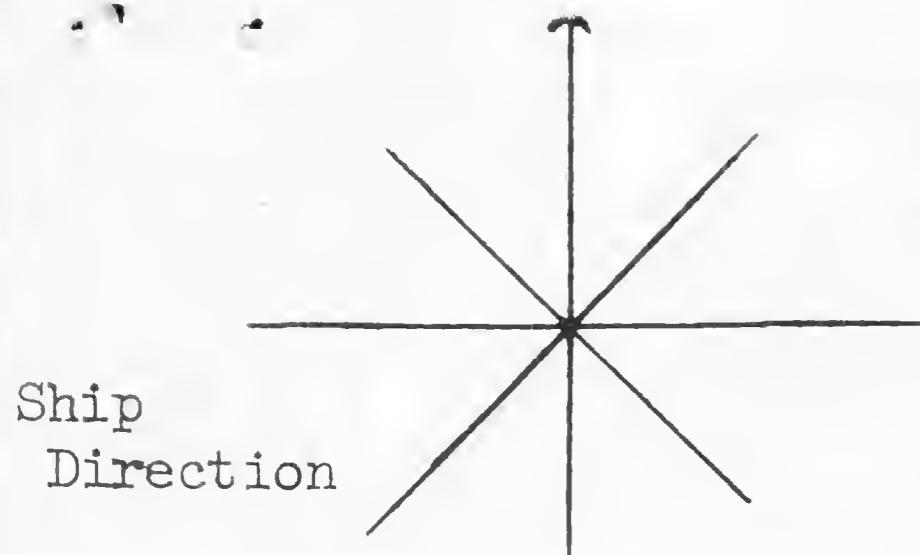
Miles travelled from sunrise to sunset = 159

Miles travelled from sunset to 2400 hours = 56

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	0800	LOMAD	22-18N	162-23W
2.	1000	LOMAD	22-10N	161-59W
3.	1825	VISUAL	21-42N	160-11W
4.				
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Cloud Cover		Temp
					658	6 HT	
0100							
0200	22-02N	163-30					
0300							
0400	22-35N	163-05					
0500							
0600	22-25N	162-41	CALM	4	085-12	76	
0700	22	36					
0800	22-18N	162-23W					
0900	14	11					
1000	22-10N	161-59W					
1100	08	46					
1200	22-04N	161-33W	CALM	3	085-1-2	84	
1300	01	20					
1400	21-58N	161-08W					
1500							
1600	21-53N	160-41W					
1700							
1800	21-42N	160-15W	CALM	3	085-1-2	82	
1900							
2000	21-37N	159-51W					
2100							
2200	21-31N	159-25W					
2300							
2400	21-25N	159-01W	CALM	2			



LT 2086
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

De Long Island
Burkhader

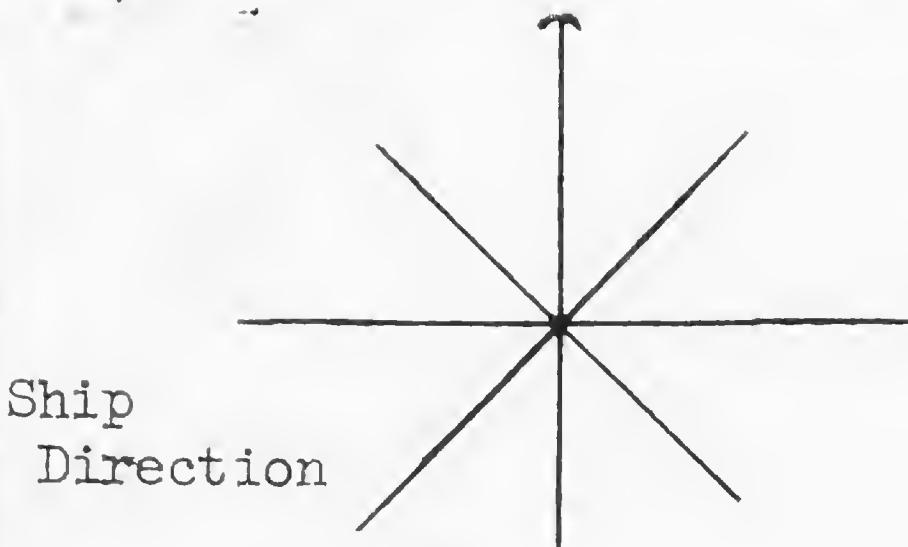
SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

Date 14 June
Pg. # 1

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0645					begin to obs.
0645	LTs	1 ✓	SS		LT
0700	"	1 ✓	"		"
0705	Wh. Tern	1 ✓	W		Trembling
0706	Shear Sooty	1 ✓	SW		A. ♀
0710	WTS	1 ✓	"		LT
0717	"	1 ✓	SE		"
0720	"	1 ✓	SE		"
0720	Sooty T	1 ✓	N		Ad
0725	Bulwer's Pet.	1 ✓	SS		
0726	Sooty Tern	4 ✓	SW		possible Sooty
0729	Sooty Tern	2 ✓	SS		Ad.
0732	"	1 ✓	"		"
0740	"	1 ✓	N		"
0745	St-B Tern	1 ✓	E		
0748	W-T Shm	1 ✓	SE		LT
0758	M-B Tern	2 ✓	E		Ad
0808	Fairy T	1 ✓	S		
0812	M-B Tern	1 ✓	W		Ad
0813	WTS	1 ✓	SS		LT
0818	Bulwer's Pet.	1 ✓	SS		
0820	Large Pterodroma	1 ✓	SS		heavily mottled upper surface. Gliding white underwings probably molt
0822	W-T Shm.	1 ✓	SS		but flight was most incisive as it merely flapped along surface - gliding in intervals. No other characteristic wings note
0827	Sooty Tern	1 ✓	N		Ad



Ship
Direction

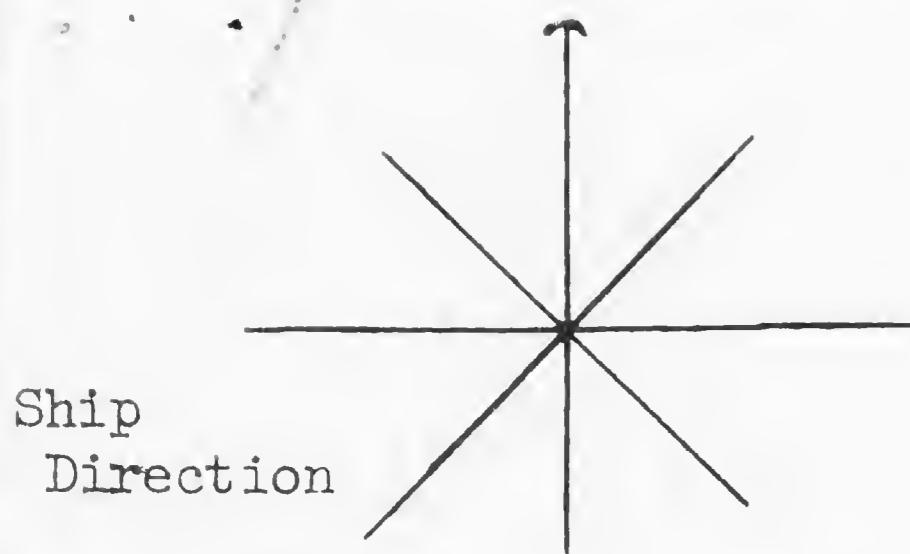
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 14 June 1967
Pg. # 2

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0830	Bulwer's Pet	1✓	SW		
0831	RF Booby	1✓	W		Ad. Lt. Ph.
0840	Bulwer's Pet	1✓	SW		
0842	WTS	1✓	SW		
0845	"	1✓	SW		LT.
0846	Noddy Sp.	1✓	"		"
0847	WTS	1✓	S		
0855	Stunno.	1✓	SE		Flying Light - Travelling
0858	Pterodroma	1✓	SE		
	so				
0900	Stunno	1✓	N		
0905	WTS L	2✓	SW		Fuscata in <u>Imatura</u>
0912	Bul	1✓	S		LT.
0916	"	1✓	S		
0917	ST	1✓	S		
0919	Boob	1✓	S		ad.
0925	WTS	2✓	S		LT.
0928	Bul	1✓	S		
0933	Bul	1✓	S		
0935	WTS	4✓	S		LT.
0936	Bul	1✓	S		
TF	C. Nod.	8✓	SE		
0937					
0938	WTS	1✓	S		
0939	Bul	1✓	S		LT.
0941	"	2✓	S		
0956	"	2✓	S		
0958	WTS	1✓	S		
1000	ST	1✓	S		LT.
1005	WTS	1✓	S		ad.
1009	Bul	1✓	S		LT.
1010	GBT	2✓	S		
1017	WTS	1✓	E		ad.
1045	WTS	1✓	SW		LT.
1050	"	1✓	SW		
1055	"	1✓	W		
1105	Common N	3✓	S		



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

De Long
Burkhardt
Stadel

Date 14 Jan
Pg. # 3

SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

1107	Bulwers	1✓	NE		
1110	Fairy T	1✓	S		
1111	Bulwers	1✓	S		
1125	Frigate	1✓	SE	Adult ♀	
1125	Sooty T	3✓	N	"	
FF	1130	Grey BT	38±	N	
	1130	Wedgetail	18✓	SE	
FF	1130	Fairy T	2✓		
	1130	BF.B.	1✓		
FF	1130	Shearwater			(Sooty, Slender B, Pale-foot)
	1130	Sooty T	20±		
FF	1145	Common N	25±		
	1145	Han N.T.	5±		
FF	1215	GBT.	1✓		Sitting on Cocconut.
	1223	WTS	1✓	3	LT.
FF	1232	Bul	1✓	3	
	1232	RFB	8✓		
FF	1232	BFA	3✓		
	1232	LA	1		
FF	1232	WTS	25±		
	1232	ST	10±		
FF	1232	Bul	2✓	3	
	1237	Albatross			F. Tern 1 - 00
FF	1242	FT	1✓	3	
	1257	Bul.	1✓	3	
FF	1258	RFB	1✓	3	
	1259	"	1✓	on Ho	
FF	1300	"	1✓	"	
	1301	WTS	1✓	0	LT.
FF	1305	WTS	10±	3	LT.
	1305	RFB	8✓		
FF	1305	AB	1✓	6 ad 2 imm	
	1310	C.Wad	4✓		
FF	1310	ST	1✓	02	ad 2687 should take over now.
	1310	SB			

Date 13 June 67 Ship ST-2007 () Cruise No. _____

Organization _____ Recorder _____

Sunrise: Time 0626 Position: Lat. 24-00, Long. 167-38 W

Sunset: Time 1945 Position: Lat. 23-08, Long. 168-58 W

Miles travelled from 0000 hours to sunrise = 26 mi

Miles travelled from sunrise to sunset = 158

Miles travelled from sunset to 2400 hours = _____

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.				
2.				
3.				
4.				
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
0100						15
0200						18
0300						15
0400						
0500						
0600	24-01	167-38	095	7	100	3 FT
0700						
0800	24-07	167-19				
0900	23-54	167-12				
1000	23-40	166-58				
1100	23-38	166-53				
1200	23-40	166-54				
1300	23-35	166-53				
1400	23-32	166-53				
1500	23-35	166-53				
1600	23-19	165-28				
1700	23-19	165-28				
1800	23-10	165-00				
1900	23-07	164-50				
2000	23-04	164-48				
2100						
2200	23-00	164-21				
2300						
2400	22-56	163-59				

Date 14 June Ship 272087 () Cruise No. 19

Organization _____ Recorder _____

Sunrise: Time 0600 Position: Lat. 22°30'N, Long. 162-50'W

Sunset: Time 1928 Position: Lat. 21°39', Long. 159°50'
60°06'

Miles travelled from 0000 hours to sunrise = 70

Miles travelled from sunrise to sunset = _____

Miles travelled from sunset to 2400 hours = _____

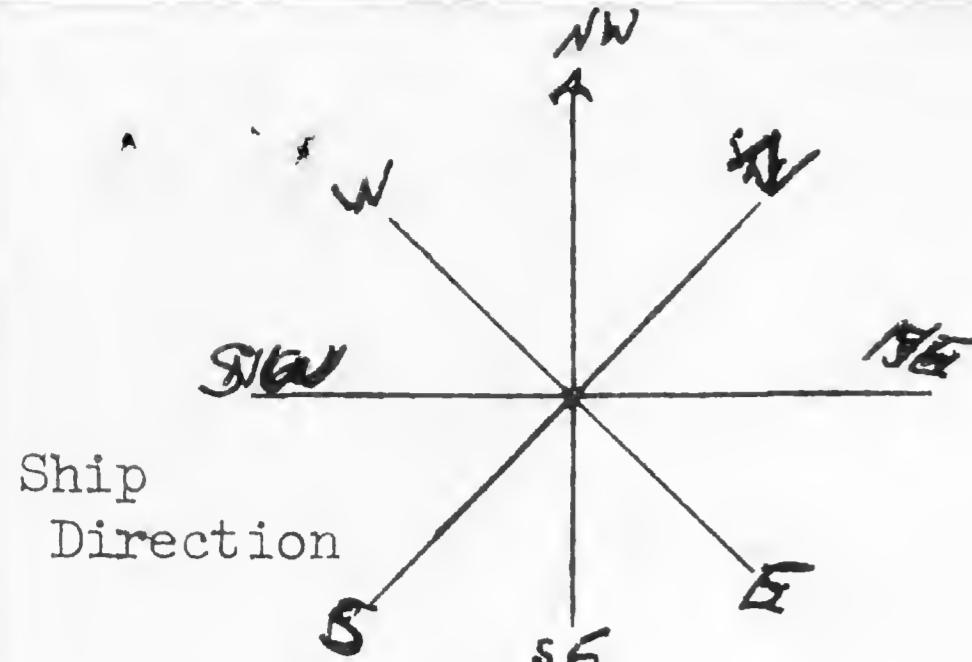
	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.				
2.				
3.				
4.	<u>1300</u>	<u>1928</u>	<u>21°39'</u>	<u>159°50'</u>
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
0100						
0200	<u>22-42N</u>	<u>163-36W</u>				
0300						
0400						
0500						
0600	<u>22-30N</u>	<u>162-50'W</u>				
0700						
0800	<u>22-18N</u>	<u>162-17W</u>				
0900						
1000	<u>22-12N</u>	<u>161-59W</u>				
1100						
1200	<u>22-03N</u>	<u>161-38W</u>				
1300	<u>00</u>	<u>23</u>				
1400	<u>21-58</u>	<u>161-08W</u>				
1500	<u>55</u>	<u>160 56</u>				
1600	<u>21-52</u>	<u>160-44W</u>				
1700	<u>46</u>	<u>30</u>	<u>37</u>			
1800	<u>21-41</u>	<u>160-15W</u>				
1900	<u>21° 38'</u>	<u>160-08W</u>				
2000	<u>0</u>					
2100						
2200						
2300						
2400						

2083

24 May



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

SPECIMEN
or

Divinal

LT2087

OBSERVERS:

SR-800 Toy
0810-1000 Thomp
1000-1200 1
1200-1400 1
1400-1600 1
1600-1800 1

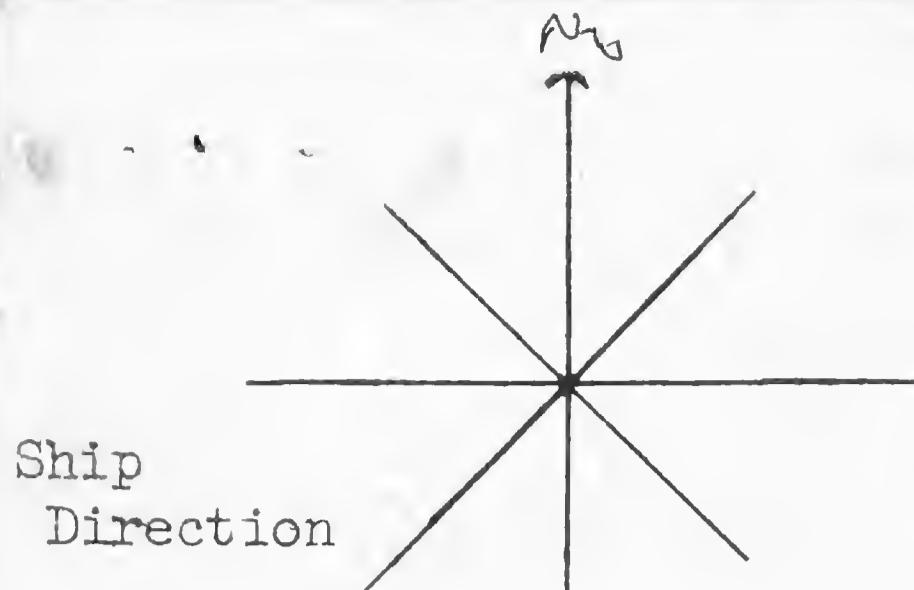
1600-1800 1
Date 24 MAY 1967
Pg. # 1

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS	SUNRISE OPEN OBSERVATIONS		
0609								
0617	Bulwer's P.	1	SE					
0619	Sooty T.	2	SE					
0624	Sooty Pet.	2	NE		ADULTS			
0625	W.T.S.	1	NE		light below			
0626	Newell's	1	NE		light phase			
0630	Fairy T.	2	NE					
0634	Sooty T.	2	NE		ADULT			
0642	W.T.S.	1	E					
0645	Tern sp.	1	SW		light phase			
0648	Common Noddy	1	NW		too distant to I.D. +			
0652	W.T.S.	1	NE					
0655	W.T.S.	2	NE		LIGHT phase			
FF	Tern sp.	50±10	SE		- light phase			
		40-500	SE					
0657	Sooty T.	1	NW					
0705	W.T.S.	2	W					
0709	W.T.S.	1	W		adult			
0710	Sooty T.	1	W		light phase			
0712	W.T.S.	1	W		light phase			
0715	W.T.S.	3	NE		adult			
0722	Fairy T.	2	NE		light phase			
20	0723	Sooty T.	1	SE	light phase			
FF	0728	Sooty T.	1	SE	adult			
	0732	Fairy T.	1	SE	adults feeding			
	0733	W.T.S.	1	SE				
	0737	W.T.S.	1	NW	light phase			
25	0745	W.T.S.	2	NW	light phase			
	0752	W.T.S.	2	N	light phase			
SF	0807	W.T.S.	1	SE	light phase			
	0807	W.T.S.	35±5	SE	light phase? Bulwer's			
	0807	Sooty T.	40±5	SE	light phase			
	0807	Fairy T.	10±1	SE	Ad.			
	0807	Fairy T.	1	SE				
	0807	W.T.S.	1	SE	light phase			
20	0815	W.T.S. Sh.	2	NW				
↓	0820	W.T.S. Sh.	1	NW	?			
FF	0827	Sooty T	28±2	NW	?			
	0830	Wedgetail	30±3	NW	?			
	0830	Fairy Tern	6	SE	?			
	0837	W.T.S. Sh.	1	SE	?			
	0837	W.T.S.	1	NW	?			

Flocks-9
(482)

295

602-756
756
SI-MNH-958-e
Rev. 5-66



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 24 MAY 1967
Pg. # 2

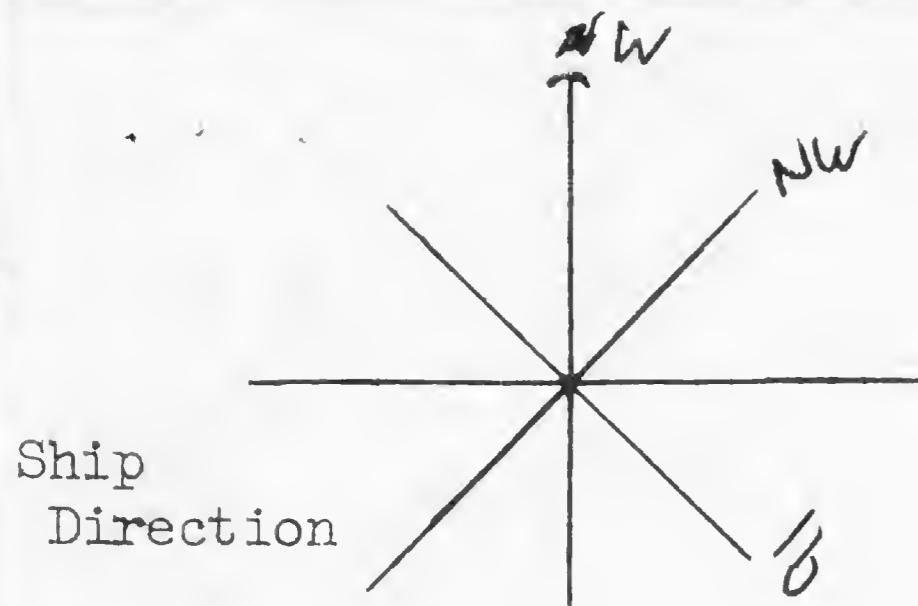
SPECIMEN
or

LT 2087

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0841	Bulwer's	1✓	SE		Positive
0845	W.T.S.	2✓	①		LT
	W.T.S.	1✓	①		? Bulwer's
0845	W.T.S.	3✓	①		
0846	W.T.S.	2✓	①		LT
0849	Fairy T.	1✓	NW		
0852	Bulwer's	1✓	E		Positive
5F 0857	W.T.S.	5055✓	SE		LT
0858	Bulwer's	1✓	SE		LT
0859	Fairy T.	3✓	E		
SF 0900	6. Frigate	1✓	①		seen.
	W.T.S.	20+			LT
	Bulwer's	1-			
0906	Bulwer's	1✓			
0908	Xmas. Is. Sh.	1✓	NE		?
FF 0912	Bulwer's	1✓	NE		
0915	WTS	120±10	①		LT
	ST	40±5	①		Ad
	FT	8±2	①		
0917	Bulwer's	1✓	N		
0918	WTS	1✓	SE		LT
0921	FT	1✓	N		
0926	Bulwer's	1✓	NW		
0938	Bulwer's	1✓	①		
0946	W.T.S.	1✓	NE		
0949	WTS	3✓	S		LT
0950	FT	2✓	N		
0951	W.T.S.	1✓	N		
SF 0954	Newell's	1✓	NE		
	Bulwer's	1✓			
	W.T.S.	25E2			LT
10158	W.T.S.	1✓	N		LT.
1006	W.T.S.	2✓	①		LT.
1007	F.T.	1✓			
1010	XMAS IS	1✓	NE		
1026	F.T.	1✓	①		
1027	R.F.B	4	①		lt. ph. adults feeding

Came in close - too large for Bulwer's

lt. ph. adults feeding



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

1000-1145 TOX
1145-0200 THOMPSON

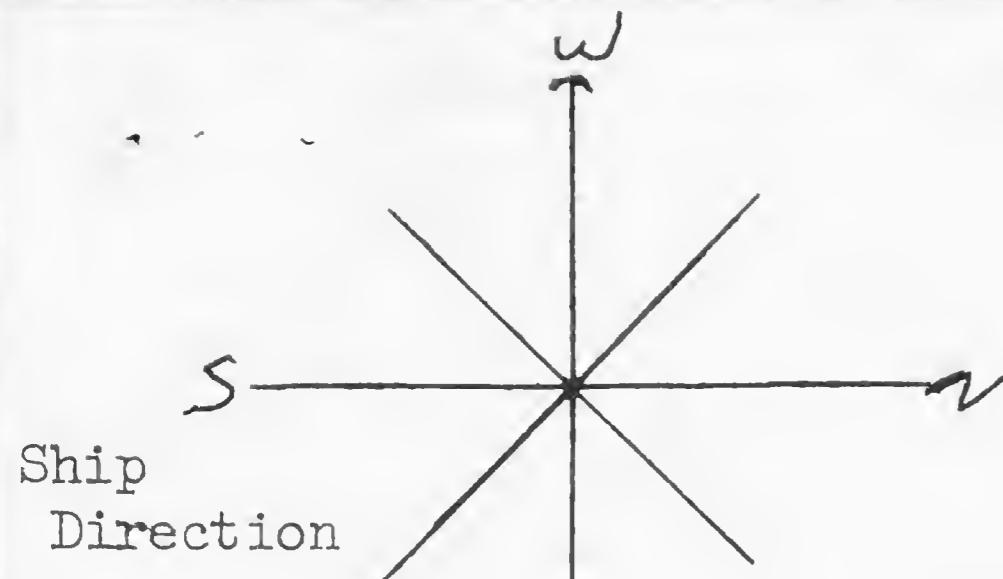
SPECIMEN
or

Diurnal

LT 2087

Date 24 May '67
Pg. # 3

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1033	Sooty T.	2	S		adults
1034	F.T.	1	S		
1040	Bulwer's	1	S		
1046	Sooty T.	1	S		
1047	F.T.	1	S		adult
1047	W.T.S.	1	S		feeding.
1047	F.T.	1	S		LT.
1050	RFB	1	S		- flying over W.T.S.
1050	Bulwer's	1	S		int ph. adult
1118	Bulwer's	1	S		
1122	F.T.	1	S		
1124	Bulwer's	2	SE		
1125	W.T.S.	1	SE		
1133	Bulwer's	1	S		LT.
1134	F.T.	1	S		
1135	R.F.B.	1	S		
1145	F.T.	2	S		int ph. adult
1145	Arctic Tern	2	S		
1159	Sher/pet.	1	S		seen together but King T.S. flew over
1200	G.Frigate	1	NW		in other direction - Ad., Black caps - light
1204	FT	1	SW		gray back, long forked tail and etc.
1211	RFB	4	E		very distant
1211	ST	3			3 LT / 1 IN = all Ad.
1211	W.T.S.	3			Ad.
1218	G.Frigate	1			20P LT
1218	F.T.	1			♀ Ad
1222	DRP	1	E		
1225	Bulwer's	1	N		
1226	FT	1	N		
1231	Bulwer's	1	NW		
1235	FT	1	SW		
1240	FT	1	N		
1245	Bulwer's	1	N		
1250	FT	1	N		
1251	FT	1	N		



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E.

OBSERVERS:

1145-0000 Thompson
1400-1600 - TVX
1600-55 - Thompson

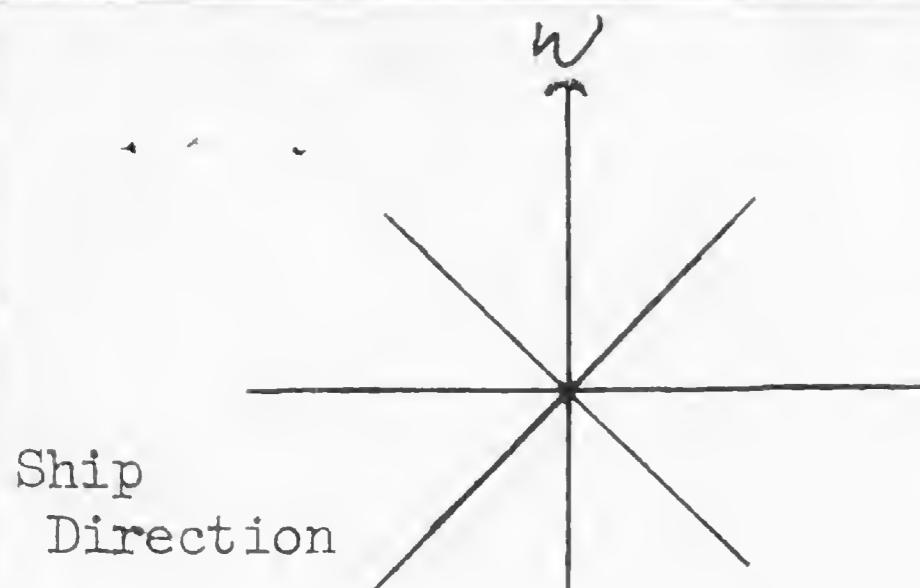
Date 24 MAY 1967
Pg. # 4

SPECIMEN
or

Diurnal

on LT 2087

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1305	FT	1✓	SE		
1323	Sooty Shr.	1✓	W		
1330	FT	1✓	E		
1335	Bulwer's	1✓	E		
1337	Bulwer's	1✓	W		
1340	RFB	2✓	E		LT, INT - ad
1340	FT	1✓			
1345	GBT	1✓	N		DD.
1352	Newell's	1✓	NW		
1353	FT	1✓	NE		
1415	F.T.	1✓	N		
1422	W.T.S	3✓	N		
1422	Bulwer's	1✓	N		lt ph.
1424	W.T.S	1✓	N		
1505	Bulwer's	1✓	E		lt ph.
1508	Blackfooted ALB	1✓	W		
1510	W.T.S	1✓			adult
1510	Bulwer's	1✓	N		lt ph.
1523	W.T.S.	1✓	N		
1523	F.T.	1✓	②		lt ph.
1523	Gr. Frig.	1✓	②		
1531	W.T.S.	2✓	②		
1532	Bulwer's	1✓	E		♂ adult having overhead
1533	W.T.S	1✓	E		lt. ph.
1536	W.T.S	1✓	E		lt. ph.
1541	W.T.S	1✓	E		lt. ph.
1549	W.T.S	1✓	E		lt. ph.
1553	Bulwer's	1✓	②		
1559	W.T.S	1✓	E		
1606	Bulwer's	1✓	E		lt ph.
1609	W.T.S.	1✓	N		LT
1610	Bulwer's	1✓	E		
1614	W.T.S.	1✓	NE		
1615	W.T.S	1✓	NE		LT
1616	"	1✓	NE		LT
1617	"	1✓	SE		AT
1621	Bulwer's	1✓	W		LT
1623	S.T	1✓	E		DD
1623	W.T.S.	1✓	N		LT
1624	W.T.S.	1✓	N		LT
			SE		



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

1600-55 Thompson

SPECIMEN

or

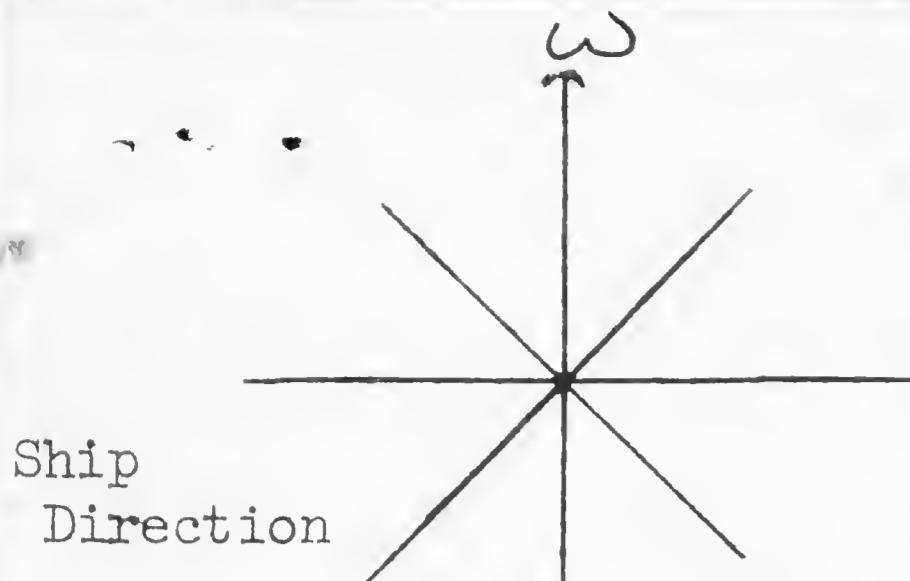
Diurnal

LT 2087

Date 24 MARCH 1967
Pg. # 5

TIME SPECIES # DIR. BAND NO. REMARKS

1631	ST	1	E	ad
1635	ST	3	NE	ad
1635	W.T.S.	1		
1640	W.T.S.	1	SE	LT
1644	S.T.	1	E	ad
1645	S.T.	1	E	ad
1646	CNT	1		
1647	FT	1	E	Sit on a piece of Flotsam, ad.
1652	CNT	3	E	
1652	FT	1	E	ad.
1653	BFA	1	O	ad.
1655	W.T.S.	2	O	ad.
1657	Shear/poth	1	W?	
1700	Bulwer's	1	N	Very distant - go on horizon
1703	BFA	1	O	
1708	W.T.S.	2	O	LT
1710	Bulwer's	2	E	
1715	W.T.S.	2	N	LT
1716	Bulwer's	1	SE	
1721	Bulwer's	1	SE	
1722	W.T.S.	1	E	LT
1725	ST	3	E	ad.
1728	Bulwer's	1	NE	
1729	Bulwer's	1	NE	
1731	W.T.S.	1	E	LT
1740	S.T.	1	NE	ad.
1803	W.T.S.	3	E	lt ph.
1807	B.F.B.	1	N	IMMATURE
1810	W.T.S.	1	W	lt. ph.
1811	LEACH'S	1	O	
1812	Bulwer's	1	O	
1820	Bulwer's	1	O	
1826	Newell's	1	E	
1828	Sooty T.	2	SE	ad.
1830	W.T.S.	1	N	LT
1836	"	1	N	LT



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

1600-55 Thompson

Date 24 MAY 1967
Pg. # 6

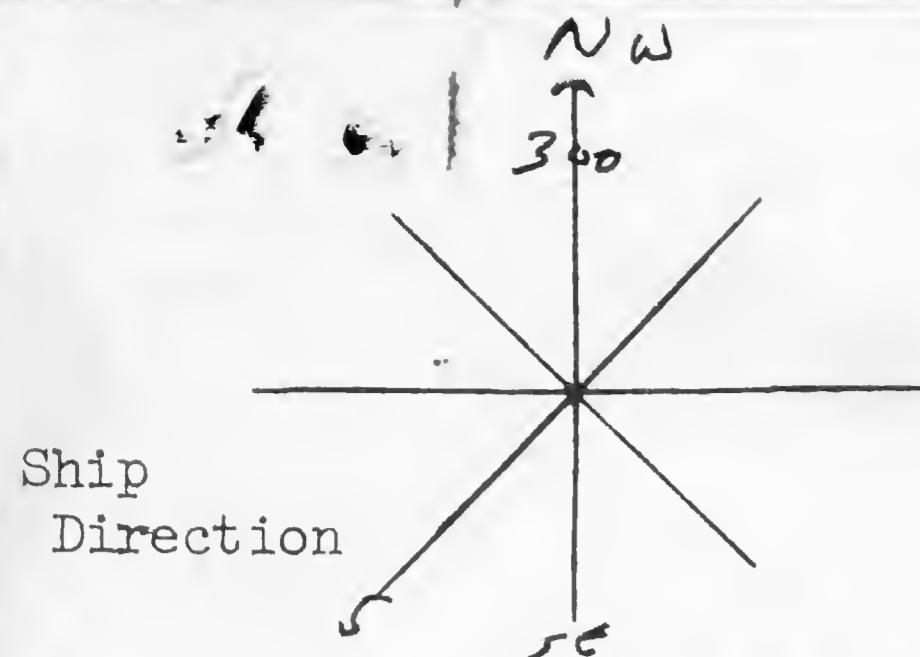
SPECIMEN

or

Dunn
DT-2087

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1845	Shear/pet	1✓	E		- white arc on horizon ?WTS
1854	W.T.S.	1✓	W		2+
1855	W.T.S.	2✓	E		LT
1857	ST.	3✓	N		BD.
1858	F.T.	1✓	Ø		
1903	W.T.S	2✓	E		2+
1904	F.T.	1✓	E		
1905	GBT	1✓	N		
1906	Bulwer's	1✓	W		
1907	W.T.S.	2✓	W		2+
1911	W.T.S.	1✓	N		2+
1914	ST.	1✓	W		BD.
1920	F.T.	1✓	N		

1423-55



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

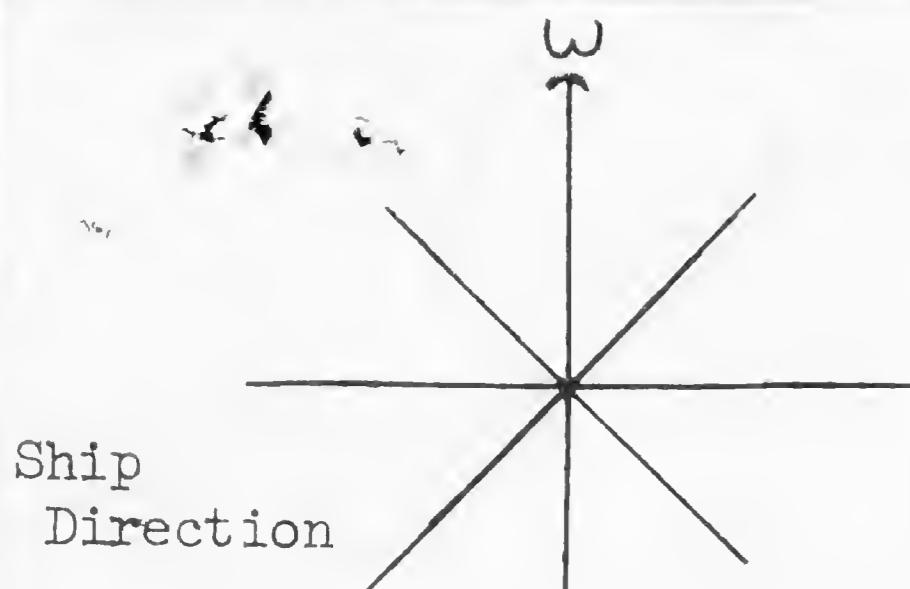
OBSERVERS:
SIR - good Thompson

SPECIMEN
or

Diurnal

Date 25 MAY 1967
Pg. # 1

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS	LT 2087	
0617	BFA	1✓	O		Following ship - 270		
0619	Bulwer's	2✓	SE				
0621	Sooty T.	2✓	E				
0625	BFA	1✓	O				
0626	WTS.	1✓	O		Following LT 2086	2 75 50 10	WTS 205
0629	BFA	1✓	E				Small Pter. 1
0630	W. t. HIC	1✓	O				4 Bulwer's 2617
0631	Sooty Tern	2✓	O		Follow ship		
0635	ST	3✓	NE				WTS 2 -
0636	ST	7✓	E				CFB # 3
0637	WTS.	1✓	N				2 RFB-3 3 -
0638	ST	4✓	E				16 F
0639	ST	5✓	NE				WT 1 -
0640	ST	3✓	E				Phalarope? 1 -
0641	CNT	2✓	NE				435
0642	WTS	1✓	E				ST 35 434
0642	ST	1✓	E				4 CNT 14 -
0648	CNT	2✓	E				HNT 1 -
0649	ST	1✓	E				
0653	BFA	2✓	O		total at 5 following ship at this time		
0655	WLSp	1✓	NW				FT - 4 -
0656	CNT	1✓	NE				S/P 1 -
0657	ST	1✓	E				647-728
0658	CNT	1✓	NE				727
0659	Bulwer's	1✓	E				
0700	ST	1✓	E				734
0701	CNT	1✓	E				
0702	Bulwer's	2✓	E				
0703	WLSp	1✓	N				
0704	G. frigate	1✓	O				
0707	ST	1✓	E				
0714	ST	2✓	E				
0715	Bulwer's	1✓	N				
0718	Bulwer's	1✓	E				
0722	W.T.S.	1✓	NW				
0724	Bulwer's	1✓	SW				
0725	ST	1✓	SE				
0726	CNT	3✓	N				



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

5/2-0800 THOMPSON
0800-1000 - TUX
0630 - THOMPSON

SPECIMEN

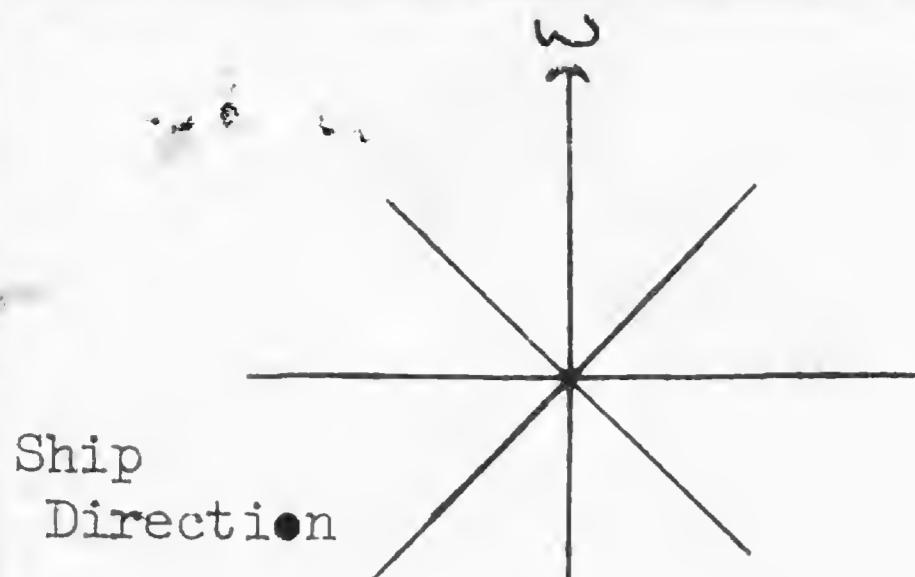
or

Diurnal

Date 25 MAY 1967
Pg. # 2

TIME SPECIES # DIR. BAND NO. REMARKS

0730	W.T.S.	1	W	Rt.
0732	W.T.S.	1	SW	Rt.
0733	Bulwer's	1	NE	
TF 0735	CWT	4	N	
	ST	1	N	Ad.
0738	BFA	9	NE	
	Laysan A	1	NE	
0745	WTS.	2	S	
				(commencing at 0800 (1/2 Hourly ALBATROSS COUNT ONLY))
0755	Sooty T.	1	N	adult
0800	B.F.A.	6		following ship.
0810	W.T.S.	1	O	lt. ph.
10 0815	Laysan A	1	O	following ship.
0816	W.T.S.	1	O	lt. ph.
0825	W.T.S.	1	NE	lt. ph.
0827	Sooty T.	1	NW	adult
0830	B.F.A.	5	O	following ship.
0830				close obs within sight of French Fr. S.
1630				open obs. about 5 mi. off Tern Island
1635	BKA	1	SO	
1638	FT	2	O	FS.
1640				Feeding
1640	Laysan A	1	O	2 Tropicops Sp.
1644	Sooty T	3	FS	
1650	BFA	2	SE	Ad.
20 1654	ST	1	O	FS
1656	Shearwater	1	W	Ad.
1701	BFB	1	SW	? Pterodroma
1702	HNT	1	NE	Ad.
1703	ST	2	NE	
25 1704	W.T.S.	1	O	Ad.
1706	Bulwer's	1	E	Rt.
1708	ST	2	N	
1717	FT	1	E	Ad.



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

•BSERVERS:

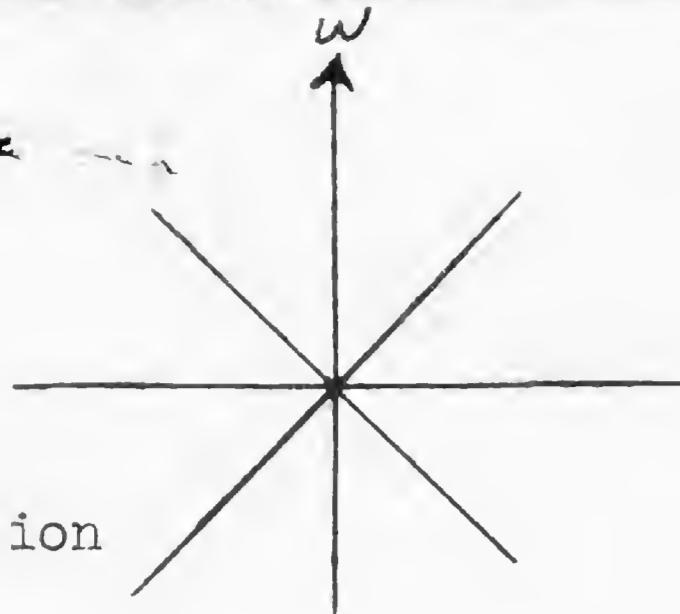
1630-1740 Thompson
1745-55 Tux
1941

Leeward
SPECIMEN Diurnal

Date 25 MAY 1967
Pg. # 3

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1724	W.T.S.	1 ✓	E		at
1734	S.T.	1 ✓	S		80
1737	LT	1 ✓	SE		
1744	Sooty T.	34 ✓	E		adults
	W.T.S.	2 ✓	E		lt ph
	B.F.A.	1 ✓	O		following ship.
1748	Gr. Frig	1 ✓	O		
1750	Bulwer's	1 ✓	NW		
1751	B.F.B	2 ✓	E		adults.
1753	W.T.S.	1 ✓	W		lt ph
1754	R.F.B	1 ✓	E		lt ph adult
1754	Sooty T	2 ✓	E		adults.
1755	B.F.A.	1 ✓	W		
1756	Sooty T.	1 ✓	E		adult
1803	Sooty T	5 ✓	E		adults
1805	W.T.S.	3 ✓	E		lt phase
1807	W.T.S.	3 ✓	E		lt ph.
1815	Sooty T.	60+5	O		adults
	W.T.S.	75+5	O		lt phas
	Bulwer's	4 ✓	O		adults } encompassed large
	R.F.B.	2 ✓	O		area of ocean
1820	Sooty T.	135 ✓	O		lt ph adult.
	W.T.S.	50 ✓	O		adults
	Gr. Frig.	1 ✓	O		lt phase
1824	Laysan albat	1 ✓	O		adult ♀
1830	B.F.A	2 ✓	O		
	W.T.S.	10 ✓	O		
	Sooty T.	60+5	O		lt ph.
1834	W.T.S.	4 ✓	W		adults.
					lt ph.

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

-55 - Tux

1941

SPECIMEN
or

LT 2087

Date 25 May '67
Pg. # 4

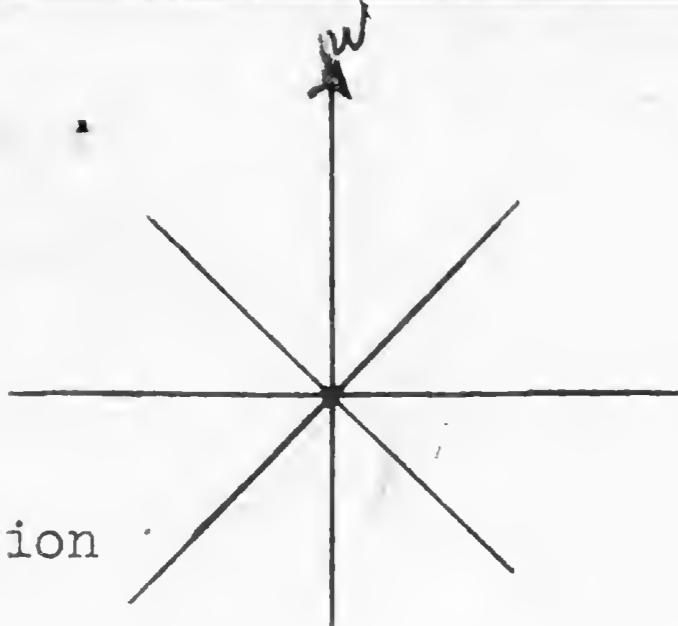
TIME SPECIES # DIR. BAND NO. REMARKS

1843	W.T.S.	1✓	W	—	lt. ph.
1850	B.F.a.	1✓	①	—	
1851	W.T.S.	1✓	N	—	lt. ph.
1855	Phalarope sp.	1✓	②	—	blew sooty near bow then sat on water — gray back $\diagup \diagdown$ — light wing markings —
FF	B.F.a	3✓	②	—	
	Sooty T	90✓	②	—	adults } all feeding very heavily —
	W.T.S.	40✓	②	—	W.T. & ALC - sitting on water.
1905	Pterodroma	1✓	E	—	small } Bunched together
					Island?
1908	Sooty T.	1✓	E	—	adult.
1911	Bulwer's	1✓	E	—	
1912	Sooty T	1✓	E	—	adult.
1915	B.F.a	2✓	②	—	
1923	B.F.a	1✓	—	—	
1924	Bulwer's	1✓	E	—	
1930	W.T.S	2✓	②	—	
1940	B.F.a	2✓	②	NW	lt. ph. following ship.

1941

SUNSET END OBS.

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

SR0800 TUx

SPECIMEN
or

LT2087

Date 26 May '67
Pg. # 1

TIME SPECIES # DIR. BAND NO. REMARKS

0633					SUNRISE Begin OBS - (W - 270 - 285°)
0645	W.T.S.	1	W	lt ph	Gardiner's Pinnacles in sight.
0650	G.B.T.	2	E	adults	LAO ✓
0700	G.B.T.	2	SW	adults	BFA 1.7 ✓ 45° S T-211
0704	W.T.S.	1	W	lt ph	WTS 150 ✓ 5° 85°
0714	B.G.N	1	Ø		Bulwer's SV 400
0715	B.F.B.	1	Ø	adult.	BFB - 1 ✓
0719	G.B.T.	1	Ø	adult	GF 2 ✓
0719	B.F.A.	1	Ø	adult	GBT - 8 ✓
0720	W.T.S.	1	Ø	lt. ph.	BGN - 2 ✓
0728	G.B.T.	3	Ø	adults	CNT - 3 ✓
0730	W.T.S.	1	W	lt ph	close obs. as LT. near pinnacles
0730	B.G.N.	1	Ø		within 1 mile.
0735					Gardiner's.

Not in
Ad. forms
Count the pinnacles
around the pinnacles

5 BFB - 1 sub Ad. (Gd 30)

BGN

GBT - many - immatures (8a 1000)

GF 60+ over island

HNT - 3 +

RTB

ST -

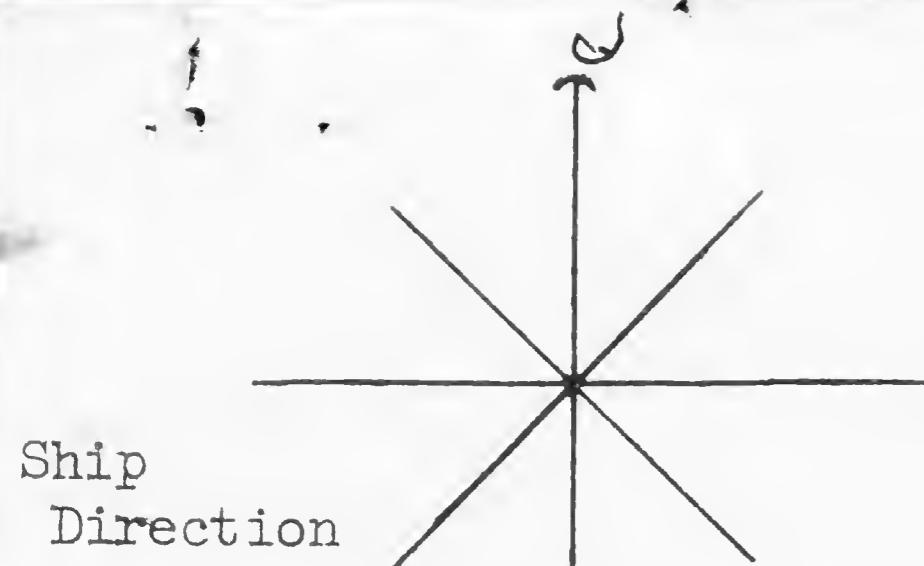
R.T. - 1

BB - 11

FT - 100

(BGN - in
primaries north)

RTB - Counting 3 prs.



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

LEEWARDS

OBSERVERS:

1200-1400 Thompson
1400-1600 - Tux
1600-1800 Thompson
1800-59 - Tux

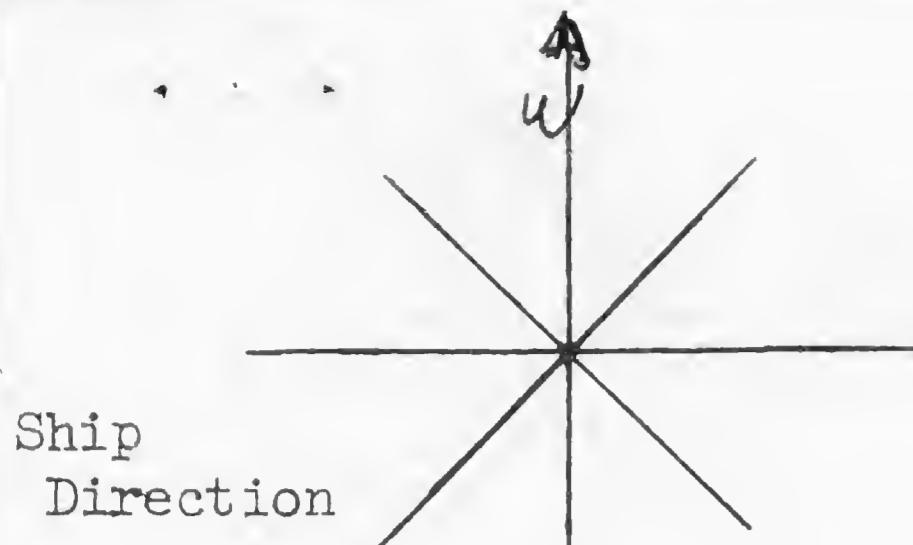
SPECIMEN
or

LT 2087

Date 26 May 1967
Pg. # 2

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1200					early observations - smiles over Gordoneir R.
1205	BFA	1	S		following ship
1212	CNT	1	NE		
1240	ST	5	N		Ad.
1241	CNT	1	E		
1300	W.T.S.	1	NE		2+
1305	W.T.S.	1	E		2+
1314	BFA	1	①		
1334	W.T.S.	1	E		Following ship - total = 2
1337	S.T.	2	E		2+
1345	G. Frigate	1	E		Ad.
1349	Bulwer's	1	N		Ad. ♀.
1354	S.T.	1	W		Ad.
1356	S.T.	4	SW		Ad.
1358	W.T.S.	1	W		2+
1359	Bulwer's	1	S		
1407	CNT	1	S		
1407	W.T.S.	1	S		4 ph.
1424	W.T.S.	2	N		ct. ph.
1426	B.F.A.	2	①		following ship.
1432	Sooty T.	1	E		
1436	W.T.S.	1	S		adult
1452	W.T.S.	2	W		lt. ph.
1504	Bulwer's	6	①		lt. ph.
1513	Sooty T.	1	NE		adult
1525	Sooty T.	85±15	①		adult
FF	Fairy T	1	①		adults } feeding
1548	W.T.S.	15	①		lt. ph.
	G. Frig.	1	①		hoving }
	W.T.S.	1	①		lt. ph.
		1	①		lt. ph.
1556	W.T.S.	1	W		
1610	Bulwer's	1	E		
1615	W.T.S.	1	W		Ad.
1628	W.T.S.	1	W		Ad.
1639	Bulwer's	1	W		Ad.
1651	W.T.S.	1	①		
1653	W.T.S.	1	SW		2+
		1	S		Ad.

1 1
1 50
2 11
3 39
4 00



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E *Leeward*

OBSERVERS:

1600-1800 Thorson
1800-2000 Thorson

SPECIMEN
or

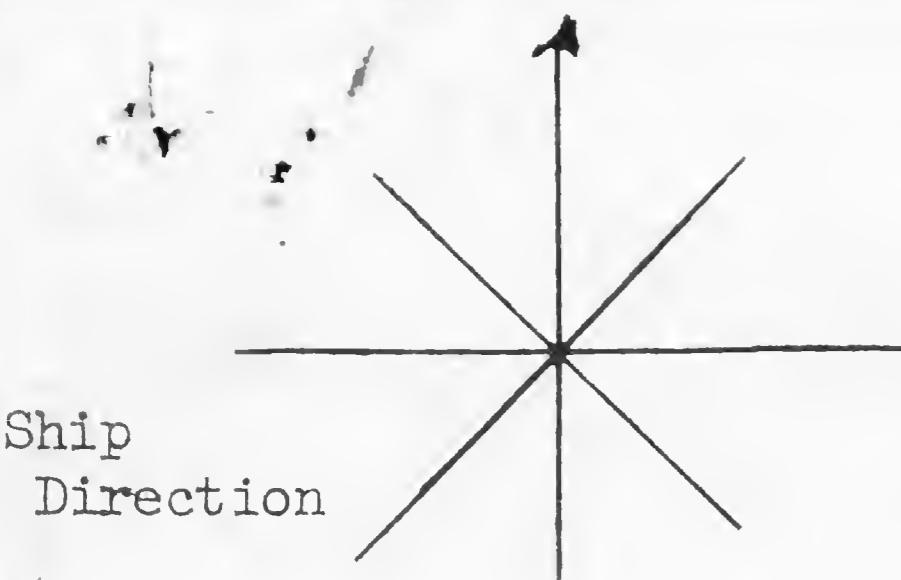
LT 2087

Date 26 May 1967
Pg. # 3

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1705	B.F.A	6	O		following ship
1710	W.T.S.	1	E		xt.
1711	"	1	W		xt.
1715	W.T.S.	3	W		xt.
1717	W.T.S.	1	E		xt.
1725	W.T.S.	1	NW		xt.
1726	B.F.A	2	N		
1745	W.T.S.	1	N		
FF 1745	Sooty T.	45	O		lt. pl.
	W.T.S.	40	O		adults } feeding
1755	W.T.S.	1	E		lt. ph.
FF 1804	W.T.S.	50±10	O		lt. ph.
	Sooty T.	65	O		lt. ph.
1819	W.T.S.	2	NE		adults.
1823	W.T.S.	2	O		lt. ph.
1830	W.T.S.	3	N		lt. ph.
1831	Sooty T	2	SW		lt. pl
1850	W.T.S.	3	W		adults
1858	Laysan Albatross	1	O		lt. pl
1858	B.F.A.	4	O		following ship
1906	W.T.S.	3	W		" "
1924	W.T.S.	1	W		lt. ph.
					" "

2004

Sunset end obs.



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

SR-800 Thompson

SPECIMEN
or

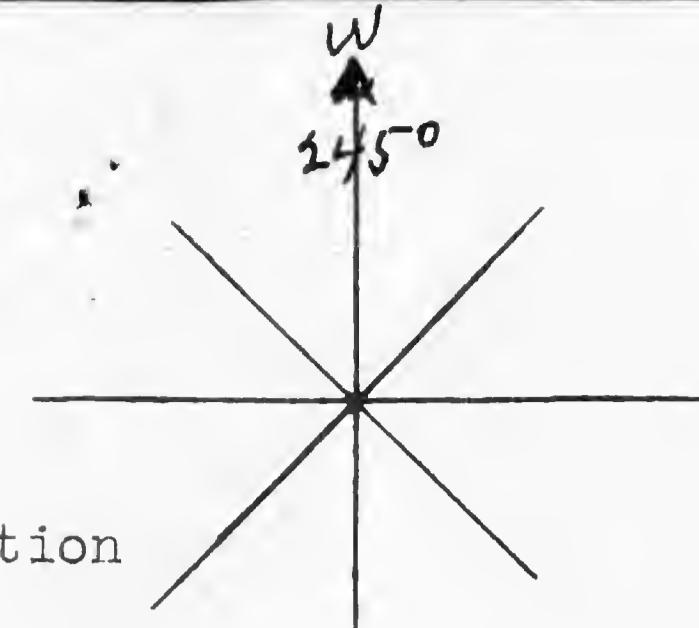
LEEWARDS

LT 2087

Date 27 May '67
Pg. # 1

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS	
0635	Laysan A	1	Q		sunrise begin abs.	
0639	L.T.S.	2	N		around ship	LA 36 x 37
643	W.T.S.	1	NE		2+	BFA 33 34
0645	Bonin Is. P.	2	N			WTS 179 175
0646	Laysan A	1	E			Xmas I 1
0647	B.I.P	1	N			B.I.P 35
0655	B.F.A	3	6		following sh. is	WNSP 2
	W.T.S.	1	E			Bulwer 1
	W.T.S.	2	N			RFB 1
0700	Sterna sp.	1	N		Arctic ? & not GBT?	RTB 1
0701	W.T.S.	2	N			
0702	B.I.P	2	N		2+	
0703	LA	2	Q			
704	W.T.S.	4	N		2+	
0705	W.T.S.	10	Q		one sweep at the horizon - lt. alt.	
0706	B.I.P	2	N			ST - 20 22
0708	Xmas B.	1	N			FT - 2
0711	B.I.P	2	N			Sterna sp. - 1
0714	B.I.P	1	N			Arctic F. - 1
0715	W.T.S.	1	N			SKUA - 1
0716	B.I.P	1	S			
0717	ST	2	E			
0717a	W.T.S.	1	N		AD.	
0718	W.T.S.	1	N		2+	
0719	B.F.A	1	NW		2+	
0720	W.T.S.	1	N		2+	
0721	W.T.S.	1	E		2+	
0724	Bulwer's	1	N		2+	
0725	W.T.S.	1	N			312
0727	W.T.S.	2	N		2+	
0728	W.T.S.	3	N		2+	
	Laysan A	1	N		2+	
0729	B.F.A	1	NW			

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

SR-0200 Thompson
0800-1000-Tax

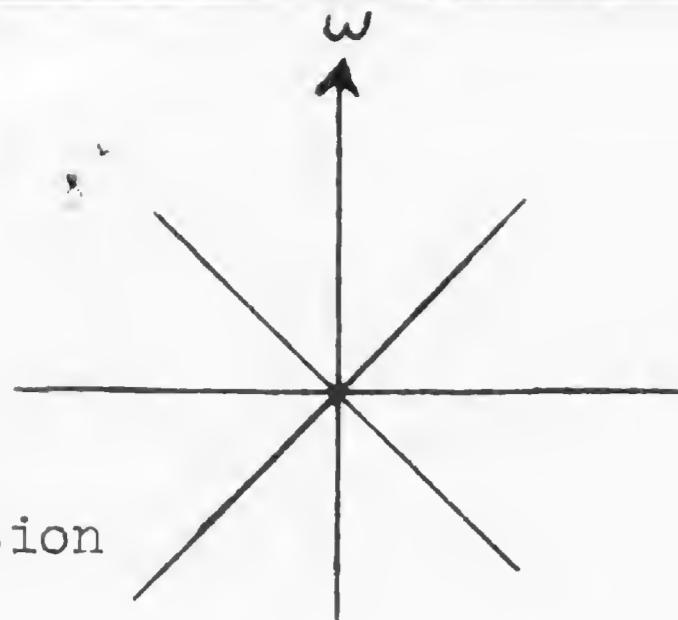
Leenards

LT-2027

Date 27 MAY 1967
Pg. # 2

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0730	W.T.S.	2 ✓	N		2+
0731	RFB	1	N		Ad, LT
0734	WTS	5 ✓	N		Ad
0734	LA	2 ✓			Ad
0734	DFA	1 ✓			Ad
0740	LA	1 ✓	S		
0740	WTS	8 ✓	N		2+ } Horizon sweep.
0740	S.T.	10 ✓	N		Ad } Horizon sweep.
0741	ST	2 ✓	N		
TF 0744	W.T.S.	6 ✓	N		Ad.
0745	W.T.S.	2 ✓	N		2+
0746	BKA	6 ✓	N		Ad.
0750	Bonaparts.	1 ✓	O		Following ship
0754	W.T.S.	2 ✓	N		
0755	Bonaparts	1 ✓	N		lt. ph.
0800	W.T.S.	11 ✓	N		
0800	L.A.	6 ✓	O		lt. ph.
0800	B.F.a	6 ✓	O		following ship } one sweep of horizon
0800	Bonaparts.	2 ✓	N		
0804	W.T.S.	8 ✓	N		
0808	W.T.S.	9 ✓	N		lt. ph. } Horizon sweeps
0810	Bonaparts.	1 ✓	N		lt. ph. } - cumulative
FF 0814	W.T.S.	22 ✓	O		
0819	W.T.S.	3 ✓	N		lt. ph. feeding.
0821	W.T.S.	3 ✓	N		lt. ph.
0832	W.T.S.	3 ✓	N		lt. ph.
0840	W.T.S.	1 ✓	N		lt. ph.
0841	Bonaparts.	1 ✓	SE		lt. ph.
0843	W.T.S.	1 ✓	SE		lt. ph.
0843	W.T.S.	1 ✓	N		lt. ph.
0850	L.A.	1 ✓	O		lt. ph.
0855	Bonaparts.	1 ✓	N		same bird as 0800 sighting
0900	W.T.S.	1 ✓	S		lt. ph.

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

0800 - 1000 - Tex
1000 - 1200 - Thompson

LEEWARDS

Date 27 MAY '67
Pg. # 3

SPECIMEN

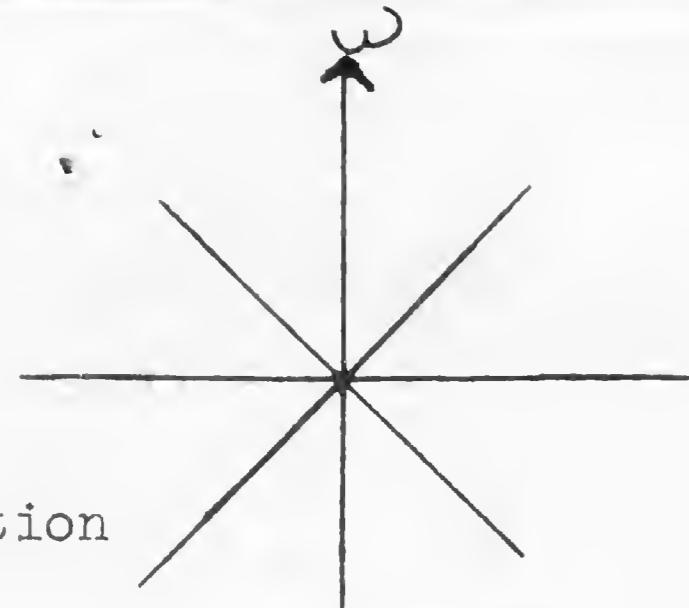
or

LT 2087

TIME SPECIES # DIR. BAND NO. REMARKS

0906	B.F.A.	1 ✓	C		
0912	Bonin cl.	1 ✓	SW		
0913	Sooty T.	1 ✓	W		
0917	Bonin cl.	1 ✓	E		
0920	Laysan Alb.	2 ✓	②		
0928	W.T.S.	1 ✓	NW		lt.ph.
0928	Bonin cl.	1 ✓	NW		
0930	B.F.Q.	3 ✓	②		
0933	Laysan Alb.	2 ✓	②		following ship.
0935	Bonin cl.	2 ✓			
0937	W.T.S.	2 ✓	SE		
0941	Bonin cl.	2 ✓	W		lt.ph.
0941	W.T.S.	1 ✓	SS		
0949	W.T.S.	1 ✓	S		lt.ph.
0955	Laysan Alb.	1 ✓	S		lt.ph.
0955	W.T.S.	1 ✓	②		lt.ph.
1000	W.T.S.	1 ✓	S		lt.ph.
1003	W.T.S.	2 ✓	W		2+
1007	B.I.P.	1 ✓	S		2+
1009	W.T.S.	1 ✓	NE		2+
1010	B.I.P.	1 ✓	S		
1014	Laysan A	1 ✓	SE		
1015	II	1 ✓	SE		
1016	B.I.P.	1 ✓	S		
1018	Laysan A	1 ✓	E		
1019	Laysan R	1 ✓	N		
1020	W.T.S.	1 ✓	E		2+
1023	Laysan A	1 ✓	SE		
1029	W.T.S.	1 ✓	S		2+
1035	B.F.A.	1 ✓	S		
1036	Sooty Terns	2 ✓	N		2+
1037	B.I.P.	1 ✓	S		
1044	Laysan A	1 ✓	SE		
1046	II	1 ✓	N		
1048	B.I.P.	1 ✓	N		
1049	W.T.S.	1 ✓	S		2+
1050	W.T.S.	1 ✓	S		LT
1053	B.I.P.	1 ✓	N		

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

1000-1200 THOMPSON
1200-1400 TUX
1400-1600 THOMPSON

SPECIMEN
or

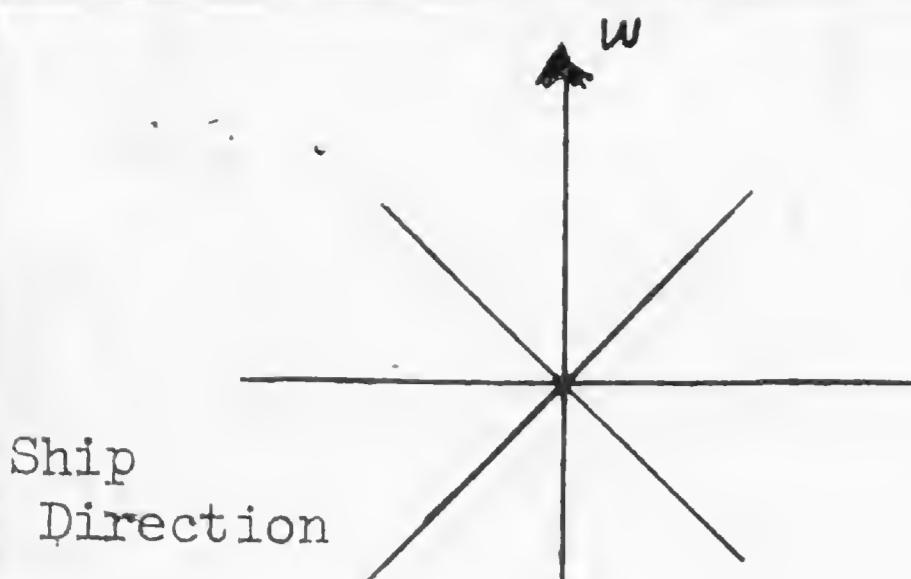
Diurnal

Leewards

LT 2087

Date 27 MAY 1967
Pg. # 4

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1055	Laysan A	1 ✓	W		
1106	B.I.P.	1 ✓	E		
1113	S.T.	2 ✓	S		ad.
1114	W.T.S.	1 ✓	S		2t.
1116	Laysan A.	1 ✓	N		
1118	Laysan A	1 ✓	S		
1120	B.I.P.	1 ✓	SE		
1138	W.R.S.P.	1 ✓	Q		? Leach's
1140	Laysan A	1 ✓	S		
1156	W.T.S.	4 ✓	Q		lt. ph.
1200	W.R.S.P.	1 ✓	Q		
1207	Bonin Is.	1 ✓	S		
1210	W.T.S.	2 ✓	SE		
1220	W.T.S.	1 ✓	W		lt. ph.
1224	Arctict.	1 ✓	N		lt. ph.
1225	W.T.S.	1 ✓	N		adult.
1230	W.T.S.	2 ✓	Q		lt. ph.
1233	Bonin Is.	1 ✓	NE		lt. ph.
1239	W.T.S.	1 ✓	Q		" "
1245	W.T.S.	1 ✓	S		lt. ph.
1250	W.T.S.	2 ✓	N		" "
1254	Laysan	2 ✓	Q		" "
1304	W.T.S.	1 ✓	Q		
1305	B.F.Q.	4 ✓	S		lt. ph.
1310	WTS	3 ✓	Q		following ship.
1318	WTS	1 ✓	N		lt. ph.
1337	WTS	2 ✓	N		" "
1355	WTS	1 ✓	W		" "
1356	R.T.T.B.	1 ✓	N		" "
1358	WTS.	1 ✓	W		ADULT.
1409	B.F.A.	1 ✓	S		dk
1415	Laysan A	1 ✓	W		
1433	Laysan A	1 ✓	SE		
1435	W.T.S.	1 ✓	W		
1439	Laysan A	1 ✓	S		2t.
35			NN		



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

SPECIMEN
or

Diurnal
LT 2087
leeward

OBSERVERS:

1400-1600 Thompson
1600-1800 - Tux
1800-55 - THOMPSON

Date 27 MAY 1967
Pg. # 5

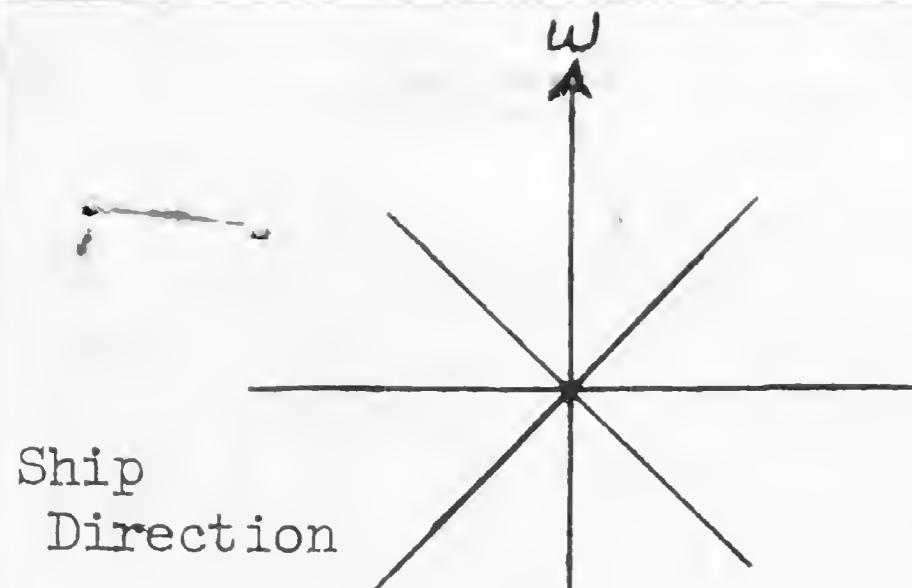
TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1445	S.T.	1	Ø		ad.
1446	Laysan A	1	a		
1530	Laysan A	1	EN		following Tug
1550	S.T.	1	E		ad.
1609	W.T.S.	1	Ø		
1641	Sooty T.	1	W		adult.
1645	W.T.S.	2	Ø		lt ph.
1646	SKUA	1	W		
1650	B.F.A.	2	Ø		
1650	Laysan A	2	Ø		} following ship.
1717	F.T.	1	Ø		feeding
1723	W.T.S.	2	W		lt ph.
1728	W.T.S.	2	Ø		" "
1748	Fairy T.	1	Ø		seen at a distance between 2087 & 2086 - approx - 2 miles out judged in relation to other tug.
1800	Laysan A.	1	Ø		
1800	B.F.A	2	E		
1842	Laysan A	1	a		Following ship.
1842	W.T.S.	2	N		Following - total approx 2
1900	W.T.S.	1	N		2t
1927	B.F.A	3	N		2t
	Laysan A	1	X		Onshore dump over - only one B.F.A following ship at the time - 3 B.F.A 1 Laysan came to the junk before it disappeared out of sight.
1928	W.T.S.	1	SW		
1945	W.T.S.	1	W		2t. to the junk before it disappeared out of sight.
1952	B.F.A	1	NE		
2021					Close observations

LA	37✓
BFA	34✓
WTSH	175✓
Xmas Isl Stern	1✓
BIP	35✓
WRSP	2✓
Bulwer	1✓
RFB	1✓
RTTB	1✓
ST	22✓
FT	2✓
Stem	1✓
Arctic stem	1✓
SKua	1

314

28000

27 May
2087



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

SR-806 TUX

SPECIMEN

LEEWARDS

Date 28 MAY '67
Pg. # 1

or

LT2087

TIME SPECIES # DIR. BAND NO. REMARKS

0647							
0650	W.T.S.	3✓	Q				
0651	B.Fa	1✓	Q				
0657	W.T.S.	6✓	Q				
0700	W.T.S.	3✓	W				
0701	Sooty T.	7✓	E				
0702	Laysan Alb.	1✓	Q				
0704	W.T.S.	6✓	Q				
0705	Sooty T.	1✓	Q				
0707	" "	2✓	E				
0711	" "	1✓	E				
0713	W.T.S.	4✓	Q				
0714	Fuddy Turnstone	5✓	E				
0715	C.N.T.	1✓	E				
0715	W.T.S.	1✓	W				
0720	W.T.S.	1✓	NW				
0720	R.T.T.B.	1✓	Q				
0720	CNT.	1✓	E				
0720	Fairy T	1✓	NW				
0722	Laysan Alb	1✓	Q				
	B.Fa	1✓	Q				
0724	CNT	4✓	E				
0725	W.T.S.	2✓	Q				
0726	Sooty T.	3✓	E				
0730	" "	3✓	E				
0734	" "	3✓	E				
0735	" "	4✓	E				
0738	Laysan	1✓	Q				
	B.Fa	1✓	Q				
	W.T.S	1✓	Q				
	Sooty T.	5✓	Q				
0745	Sooty T.	8	Q				
0752	RTTB	2	Q				

one horizon sweep.

lt ph.

lt ph.

adults

"

"

"

"

"

Ad.

adults

horizon sweep.

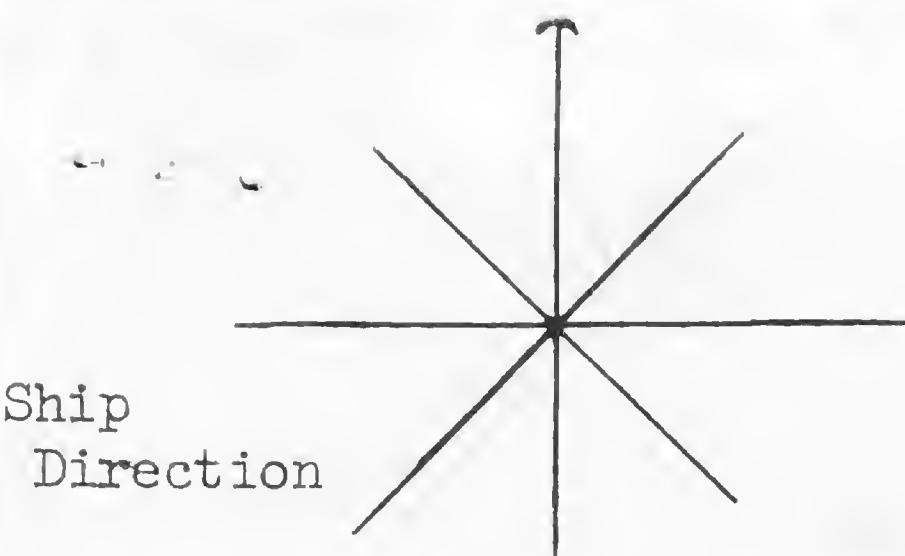
Flocks

1 = 7

0958

0647

28 MAY '67



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:
0800-1000 Thompson

SPECIMEN
or
DIR. BAND NO. REMARKS

LT 2087

Leeward

Date 28 MAY 1967
Pg. # 2

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0800	Sooty Terns	6			Horizon sweep.
0805	Laysan A	2			
	F.T.	3			
	S.T.	8			
0810	S.T.	3			
	F.T.	4			
	BKA	1			
0812	W.T.S.	3		8	Lt
0815	H.N.T.	2		00	
0816	F.T.	2		S	
0820	H.N.T.	11	E		
0825	W.T.S.	2		0	Horizon sweep.
	F.T.	1		8	
0830	W.T.S.	2	E		Lt.
TF 0831	H.N.T.	5		0	
0832	F.T.	5		0	
	Laysan A	3			
	Wedge-tail	3			
	S.T.	4			
0840	F.T.	2			
0841	H.N.T.	2			
0843	S.T.	4			
0845	W.T.S.	2	E		lt.
	Laysan A	3			
0846	H.N.T.	1			
0850	Frigate	3			
0853	BKA	10	SW		
0855	Laysan A	4	00		Attracted to culture bung by other fly
0855	BKA	5			
	Laysan A	3			
	CNT	1			
0856	S.T.	5+			
	W.T.S.				
0858	GDT	1	00		Lt.
0900			11		
					closed observation off Port + Rec.

60 11 12
11 10 5

28 May
87

67
29
38

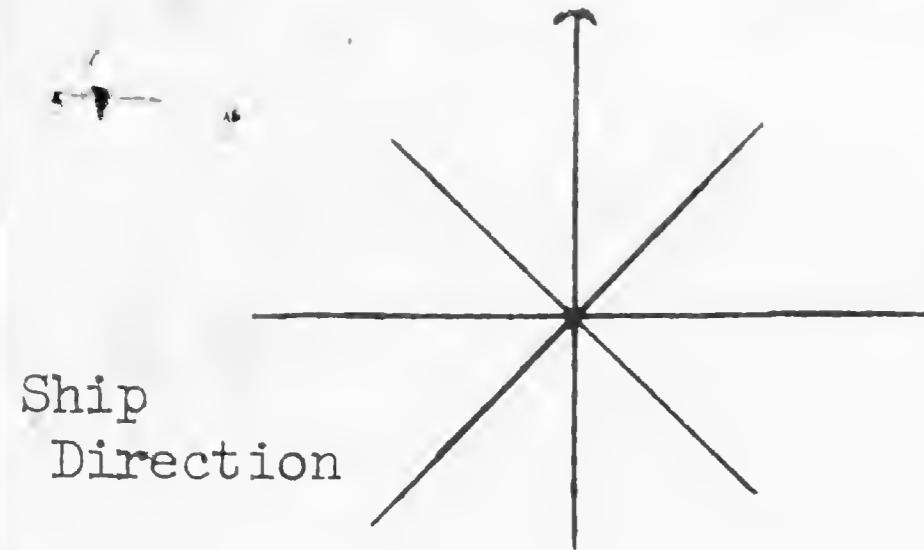
WTSL	27 ✓	13
BFA	3 ✓	16
Sooty Tern	29 ✓	38.
Laysan Albatross	3 ✓	15
Ruddy Turnstone	5 ✓	
Bl. Noddy	6 ✓	1
RTTB	0 1	2
WTern	1	17
	75	tl 0240

Great Frigate	3
Bl. Noddy	21
GB Tern	1
	127

$$\begin{array}{r} 65 \\ \times 428 \\ \hline 565 \\ 312 \\ \hline 265 \end{array}$$

$$\begin{array}{r} 129 \\ \times 37 \\ \hline 263 \end{array}$$

$$\begin{array}{r} 269 \\ \times 75 \\ \hline 404 \end{array}$$



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

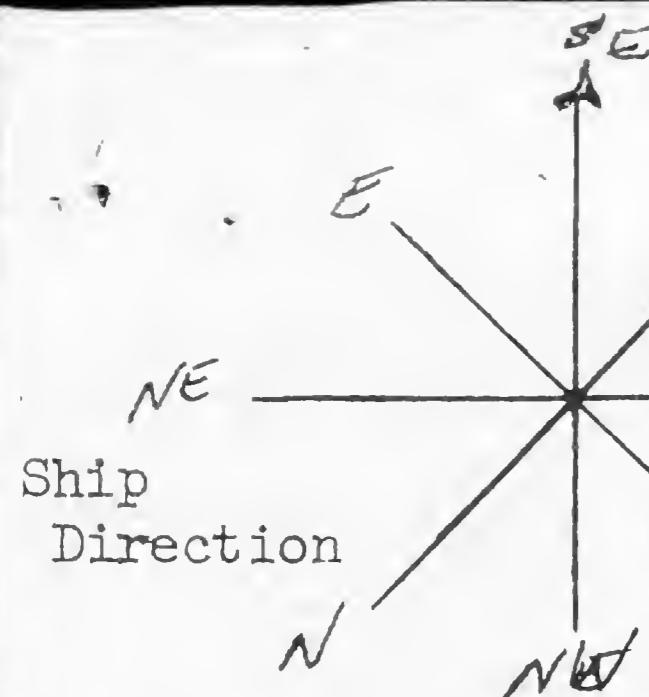
OBSERVERS:

0900-1100 Thompson

Date 30 May 1967
Pg. # 1

SPECIMEN *Diurnal*
or
DIR. BAND NO. REMARKS DT 2087

TIME	SPECIES	#	DIR.	REMARKS
0900				open ocean, 5 mi. N. of midway
0901	FT	1✓	W	
0902	W.T.S.	1✓	E	2+
0903	Laysan A.	3 ✓	⑩	
0904	ST	1✓		
0906	BKA	-1✓	W	45
0907	ST	2✓	⑩	LA - 16
0908	FT	1✓	W	BRB - 30
0909	RTTB	-1✓	W	W.T.S. - 61
0910	FT	2✓	8	NZS. - 1
0912	BRA	1✓	8	S.S. - 1✓
0920	ST	2✓	8	Bulwars - 1✓
0922	B.I.P.	1✓	W	BIP - 1✓
TF 0930	FT	1✓	W	small plm. - 1✓
	ST	6 ✓		RTTB - 1✓
0933	FT	3✓	E	6F - 1✓ 8th
0934	New Zealand shrike	1✓	W	BBB - 2✓ ad
0935	ST	2✓	W	RFB - 1✓ 8th
0936	Bulwars	1✓	W	66, 13, 6
0937	W.T.S.	1✓	W	2, 10, 6
TF 0938	ST	6 ✓	W	17 ST - 171✓
0939	FT	2✓	8	67 FT - 113✓
0942	Sooty shr.	1✓	W	CNT - 1✓
TF 0943	ST	13✓	W	29 HNT - 31✓
0945	ST	1✓	W	GBT - 5✓
0950	BKA	4✓	W	RT mtn. - 3✓
1000	FT	1✓	8	441
1006	FT	1✓	⑩	
1007	Laysan A.	3✓	8	
1011	W.T.S.	2✓	SE	
1012	ST	4✓	W	
1013	W.T.S.	1✓	SW	
1015	ST	1✓	N	
1017	FT	1✓	W	
1020	ST	3✓	W	
1024	ST	3✓	W	
				34 34 34 34
				79



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E *deewards*

OBSERVERS:

0900-1100 Thompson
1100-1300 TUX

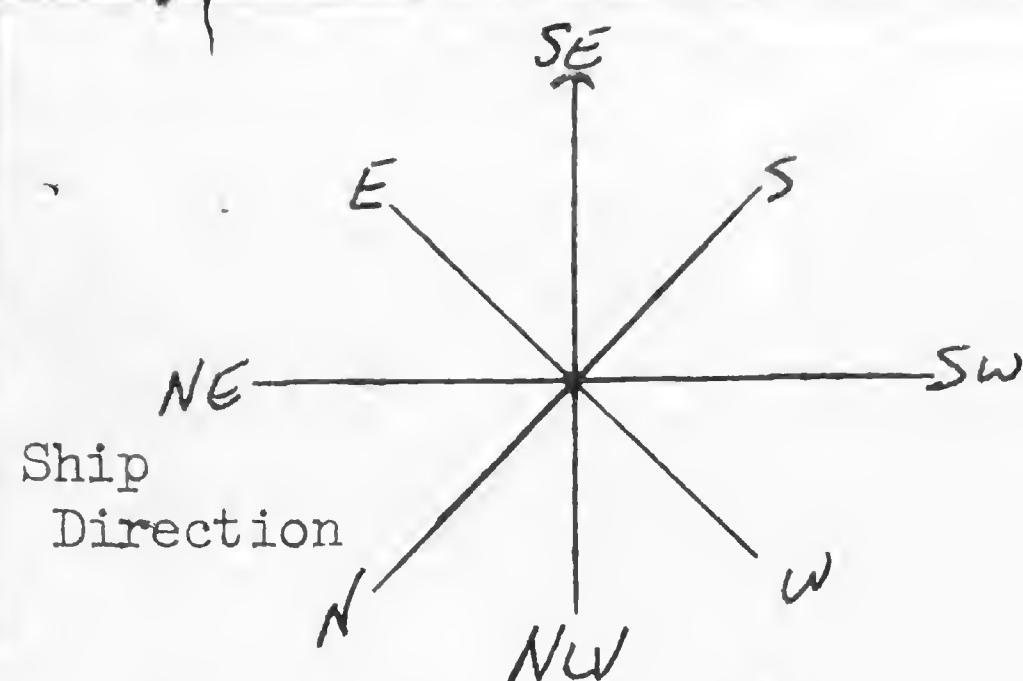
Date 30 May 1967
Pg. # 2

SPECIMEN
or

Lt 2087
Diurnal

TIME SPECIES # DIR. BAND NO. REMARKS

1031	FT	1 ✓	0	today
1032	ST	2 ✓	N	
1041	Small Pterodroma	1 ✓	W	dots
1042	FT	1 ✓	0	rot. a B.I.P. ? BWP
1048	ST	2 ✓	N	
1055	F.T.	1 ✓	W	dots.
1103	F.T.	1 ✓	N	
1105	B.F.A.	8 ✓	Q	
1106	F.T.	1 ✓	NE	following ship.
1107	S.T.	2 ✓	NW	adults.
1109	W.T.S.	1 ✓	SE	lt ph.
1115	F.T.	1 ✓	W	
1116	BKA	2 ✓	0	following ship - total ac 7
1118	RT	3 ✓	0	
1120	ST	2 ✓	W	
1121	FT	2 ✓	W	Ad
1130	W.T.S.	1 ✓	W	
1131	ST	3 ✓	W	2x
1135	F.T.	1 ✓	W	sets.
1136	W.T.S.	1 ✓	E	
1137	ST	3 ✓	NE	2x
1140	Laysan A.	2 ✓	W	Ad.
1142	F.T.	1 ✓	0	
1150	S.T.	2 ✓	SE	
1155	S.T.	1 ✓	0	adults.
	F.T.	4 ✓	0	adult
1157	Gr. Frig.	1 ✓	0	curly - adult ♀
1158	F.T.	1 ✓	0	
1203	S.T.	1 ✓	0	adult.
1206	F.T.	1 ✓	0	feeding.
1215	S.T.	1 ✓	0	adult
1220	W.T.S.	3 ✓	SE	
1234	F.T.	1 ✓	0	lt ph.
	HNT	2 ✓	0	



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

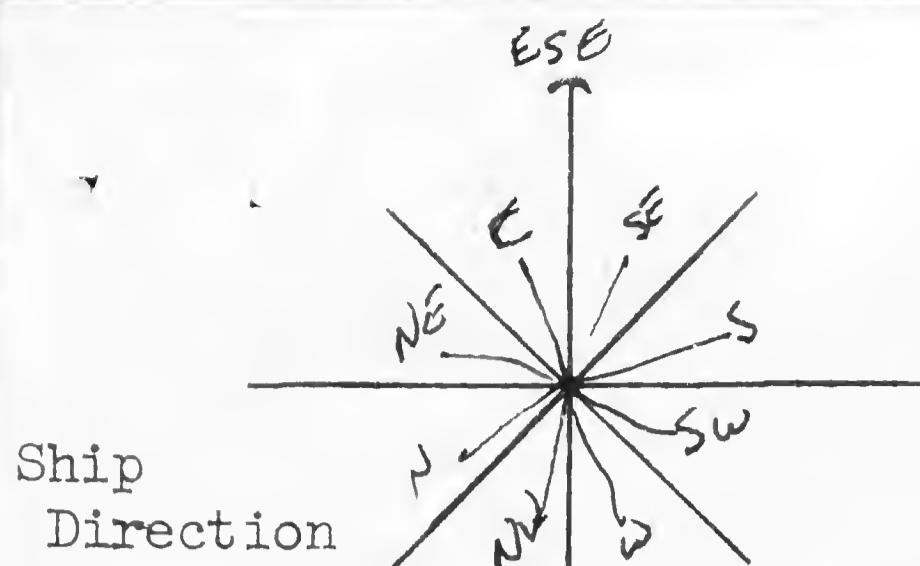
OBSERVERS:

1100-1300+ Tux
1300+ - Thompson

Date 30 MAY 1967
Pg. # 3

SPECIMEN
or
LT 2087
LEEWARDS

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS	
1237	Sooty T.	4✓	SE		adults.	
1243	W.T.S.	1✓	SE			LA
1246	Sooty T.	3✓	NE			BFA
1254	Fairy T.	1✓	Ø			WT
1258	Sooty T.	3✓	NE		adults	N.25.
1302	W.T.S.	1✓	SE		lt. ph.	SS
TF	Fairy T.	5✓	NE		traveling	CTB
TF	1307	2✓	SE		adults } traveling	RFB
	H.N.T.	4✓	SE			
	Sooty T	1✓	NE		adult	
	W.T.S.	1✓	NE		lt. ph.	
PI	1320	60✓	Ø			
	Fairy T	80✓	Ø		adults.	
	Sooty T.	25✓	Ø			
	H.N.T.	45✓	Ø		lt. ph.	
	W.T.S.	1✓	Ø		adult	
	B.F.B.	3✓	Ø			
	Laysan A.					
1326	B.F.A.	6✓	Ø			
	Laysan A.	5✓	Ø		following ship.	
1335	B.F.B.	1✓	SE			
1336	Fairy T.	1✓	E		adult.	
	Sooty T.	2✓	E		adults	
	W.T.S.	1✓	SE			
	Sooty T.	1✓	S		lt. ph.	
T.F.	1345	6✓	E		adult	
	Sooty T.					
	Fairy T.	1✓	E		adults } traveling	
1350	Common N.	1✓	E			
1350	W.T.S.	1✓	SE		lt. ph.	
1355	Fairy T.	2✓	SE			
1400	W.T.S.	1✓	Ø		lt. ph.	
1410	ST	1✓	Ø			
1415	F.T.	1✓	Ø			
	W.T.S.	1✓	N		2d	
1422	F.T.	1✓	Ø			



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:
Thompson

SPECIMEN

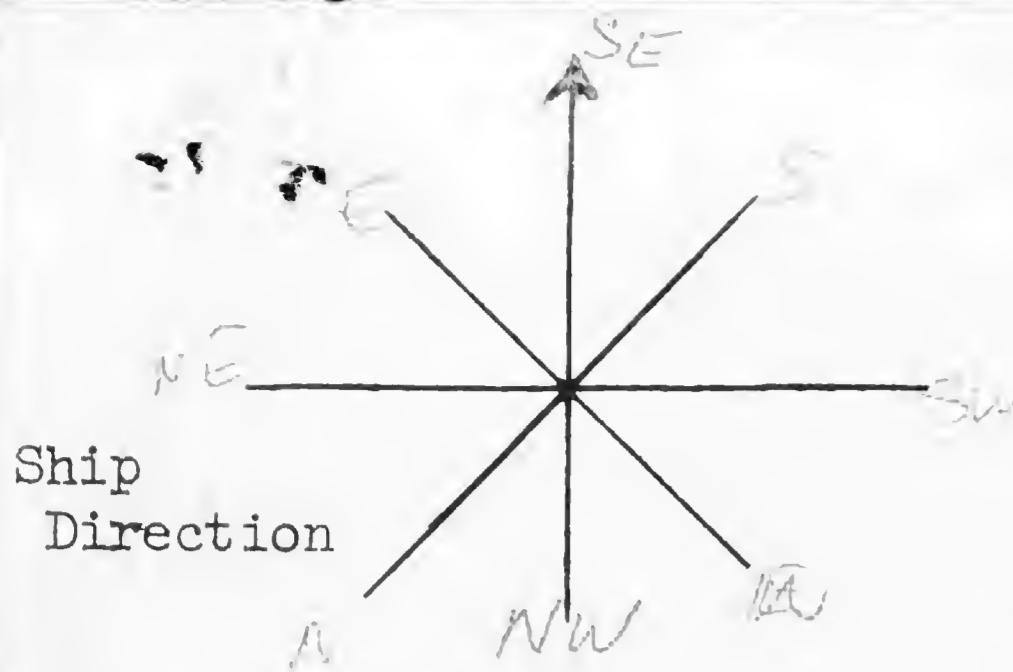
Leeward Island
LT 2087

Date 30 MAY 1967
Pg. # 4

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1425	GBT	2✓	N		
1427	FT	1✓	O		feeding
1428	GBT	1✓	N		
1439	FT	1✓	S		
1442	BFA	1✓	NE		Behind Tug
1443	RFB	1✓	SW		2+
1444	GBT	1✓	S		
1445	FT	1✓	W		
1457	GBT	1✓	N		Ad.
	ST	1✓			Ad.
	FT	1✓			
1500					watch moved to starboard Quarter deck
1503	FT	1✓	NE		
1510	FT	1✓	NNW		
1515	FT	1✓	SSW		
1520					Reef in sight, close shore in

HQ 120
GT 96
30
45
216
261

	<u>30 May</u>	<u>Midway</u>	<u>Midway -</u>	<u>Reef & Ferns</u> <u>Lidianski</u>
Laysan Albatross	6	2	8	16 ✓
B-F Albatross	6	7	6	30 ✓
W-T Shear	5	4	52	61 ✓
BIP	1			1 ✓
Bullers Shearwater	1			1 ✓
Bulwer's Pet.	1			1 ✓
Sooty Tern	44	23	103	171 ✓
RTTB	1			1 ✓
Fairy Tern	13	21	72	113 ✓
Sooty Shear	1			1 ✓
Great Frig. Al.	0	1		1 ✓
Sm. Pterodroma	0	1		1 ✓
Blk Noddy	0	20	29	31 ✓
Ruddy Turnstone	3			3 ✓
BF B			2	2 ✓
Common Noddy			1	1 ✓
Y-B Tern			5	5 ✓
RFB			1	1 ✓
				441



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

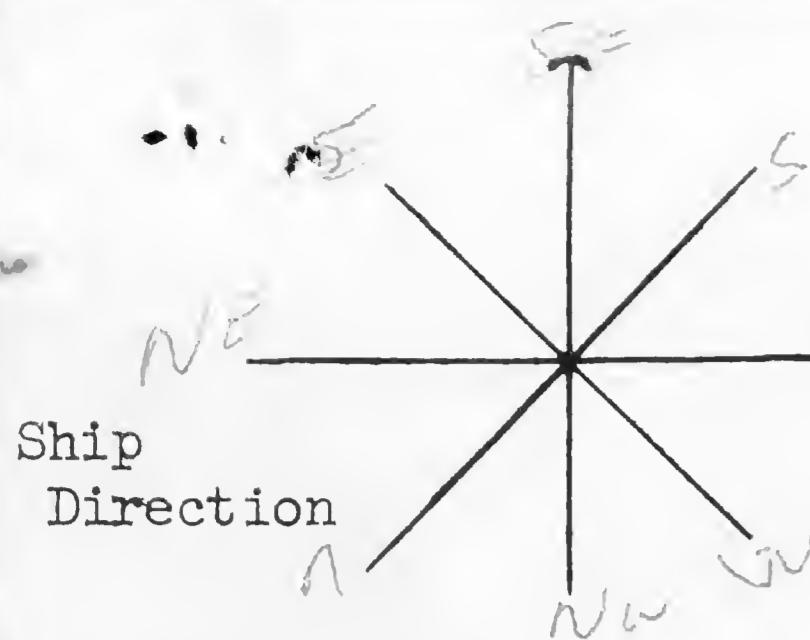
SPECIMEN
or
LT 2087

OBSERVERS:

0530-Tux-1500
1030-1200 Thoron

Date 12 JUNE '67
Pg. # 1

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS	
0830					open obs	
0835	Sooty T.	1	NW		adult	LA-1
0838	BFA	3	O		following ship	BFA-6
0840	W.T.S.	1	O		lt. ph.	
0841	Sooty T.	4	O		adults	W.T.S. 57
0843	Sooty T.	3	A		adults	
TF 0844	Sooty T.	6	SE		adults traveling	RTTB-1
TF 0845	" "	10	N		adults traveling	RFB-3
0846	W.T.S.	1	O		lt. ph.	GF-1
0855	W.T.S.	2	W		lt. ph.	RT-1
TF 0900	Sooty T.	10	S		lt. ph.	6, 10, 10, 95, 7, 8, 7, 5
0901	W.T.S.	1	O		adults	ST-99, 05
0902	" "	2	SE		lt. ph.	GOST-1
0907	Sooty T.	1	NW		lt. ph.	HNT-2
0910	GBT	1	O		adults	
25 0912	W.T.S.	3	S		lt. ph.	
0919	Buddy T	1	O			
0920	W.T.S.	2	O			
0921	Sooty T.	2	O		lt. ph.	
26 0933	BFA	1	O		adults	
TF 0935	WTS	15	SE		lt. ph.	108
0950	BFO	2	O			64
0952	W.T.S.	2	O		following ship	17
0957	Laysan Al.	2	O		lt. ph.	
1000	Sooty T.	4	O		following ship	
1002	W.T.S.	1	NW		adults	
1004	" "	1	NW		adults	
1013	Sooty T.	2	O		lt. ph.	
1015	WTS	2	O		adults	
1020	WTS	2	O		lt. ph.	33
20 1025	RFB	2	O		lt. ph.	
1030	ST	2	O		lt. ph.	
1031	WTS	1	O		lt. ph.	
TF 1032	ST	6	NW		adults	



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

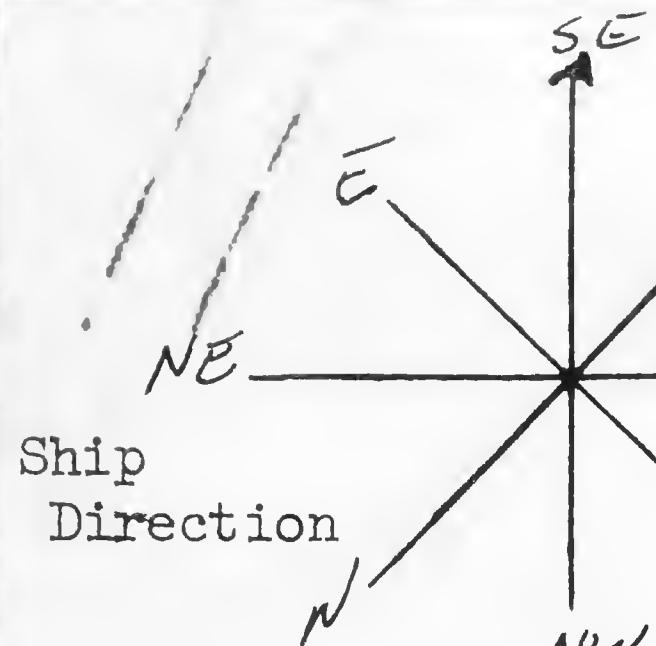
1030-1200 Thomas

SPECIMEN
or

17 2087

Date 12 MAY 1967
Pg. # 2

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
7F 1040	ST	5	SE		AD
1041	WTS	1	SE		AT
1043	G.F. slate	1	NW		SB AD - 2
TA 1045	ST	7	SE		AD
1046	ST	2	NW		AD
1047	WTS	3	SE		AT
1050	WTS	4	SE		AT
1051	ST	3	SE		AD
1054	WTS	2	SE		AT
1057	ST	2	SE		AD
1058	R TTB	1	NW		
1059	WTS	3	SE		AT
1100	ST	3	SE		AD
TA 1101	ST	8	NW		AD
HWT		2			
TF 1102	ST	7	NE		AD
TF 1103	ST	5	NE		AD
1105	RFB	1	SE		SB AD - 2 +
1107	ST	2	NW		AD
1113	WTS	3	SE		AT
1115	ST	4	NW		AD
1116	WTS	2	SE		AT
1120	WTS	3	SE		AT
2					
					16
					36
					35
					37
					27
					64
					99



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

1300-1500 - TUX
1500-1700 - CHRIS
1700-1800 - TUX
1900-55 - CHRIS

SPECIMEN
or

LT 2087

Leewards 19

Date 13 JUNE '67
Pg. # 1

TIME SPECIES # DIR. BAND NO. REMARKS

1300	W.T.S.	2 ✓	Ø	lt ph. open obs.	LA -
1305	G.B.T.	2 ✓	N	ADULTS	✓BFA f 2
1312	Sooty T.	1 ✓	E	ADULT.	✓WTS - 10 LT
1325	Haw. NODDY	1 ✓	SE	ADULT.	✓Newell's - 1 -
1333	Sooty T.	1 ✓	Ø	ADULT.	✓RKB - 2 - AD LT
1335	B.F.A.	1 ✓	Ø	Following ship.	✓BFB - 2 - AD
1340	R.F.B.	1 ✓	NW	Light phase adult	✓G.F. - 1
1348	Sooty T.	2 ✓	Ø	ADULTS	✓Bulwer's - 2 -
1350	SKUA	1 ✓	Ø	harrassing TURNS	✓S.T. - 20 -
1352	Sooty T.	1 ✓	Ø	ADULT.	✓SKUA - 1
1419	Sooty T.	1 ✓	NW	ADULT.	✓HNT - 1
1430	Sooty T.	1 ✓	SW	ADULT.	✓GOST - 2
1445	W.T.S.	1 ✓	SE	Light phase	
1458	Sooty T.	1 ✓	SE	ADULT.	
1515	BFA	1 ✓	Ø	following ship	
1530	W.T.S.	1 ✓	Ø	2 T	
1605	Bulwer's	1 ✓	Ø		no flocks
1607	Sooty Tern	4 ✓	NW		
1614	Sooty Tern	1 ✓	Ø	2 T	
1628	Bulwer's P	1 ✓	SW	AD.	
1629	RUFF	1 ✓	NW		
1637	Bulwer's	1 ✓	Ø	Sitting on the deck 1 Red RUFF	
1644	Sooty Tern	2 ✓	SE		
1656	Newell's	1 ✓	NW	Ad.	discarded, other obs are probably reliable!!
1704	W.T.S.	1 ✓	Ø	2 T	
1712	MEXICAN JAY	1	S	very easily told - IT HAD A WET BACK AND ITS BREATH SMELLED OF TORTILLAS!!	
1750	W.T.S.	3 ✓	Ø	LT PH.	
1759	Sooty T.	4 ✓	SE	ADULTS.	
1806	R.F.B.	1 ✓	Ø	adult lt ph.	
1814	Gr. Frig.	1 ✓	Ø	ADULT. ♂	
1934	W.T.S.	1 ✓	Ø		
1935	Sooty T.	1 ✓	NW	LT PH.	
1850	B.F.B.	2 ✓	NE	ADULT.	
1851	W.T.S.	2 ✓	NE	ADULTS.	
1905	Sooty Terns	2 ✓	SE	LT PH.	
			NW	AD.	

SI-MNH-958-e

Rev. 5-66

BFA

WT Shear

2 ✓

10 ✓

LT

Newells

1 ✓

RFB

2 ✓

Ad lt.

BFB

2 ✓

Ad

GF

1 ✓

Bulwer.

3 ✓

Sooty tern.

22 ✓

HNT

1 ✓

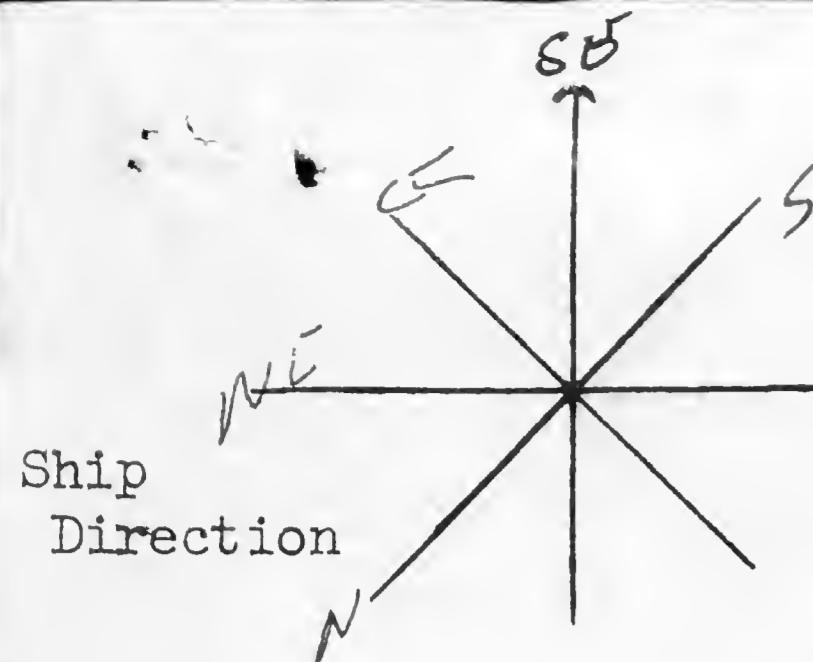
BBT

2 ✓

Skua

1 ✓

47



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

1300-1500 - TUX
1500-1700 - CHRIS
1700-1900 - TUX
1900-2100 - CHRIS

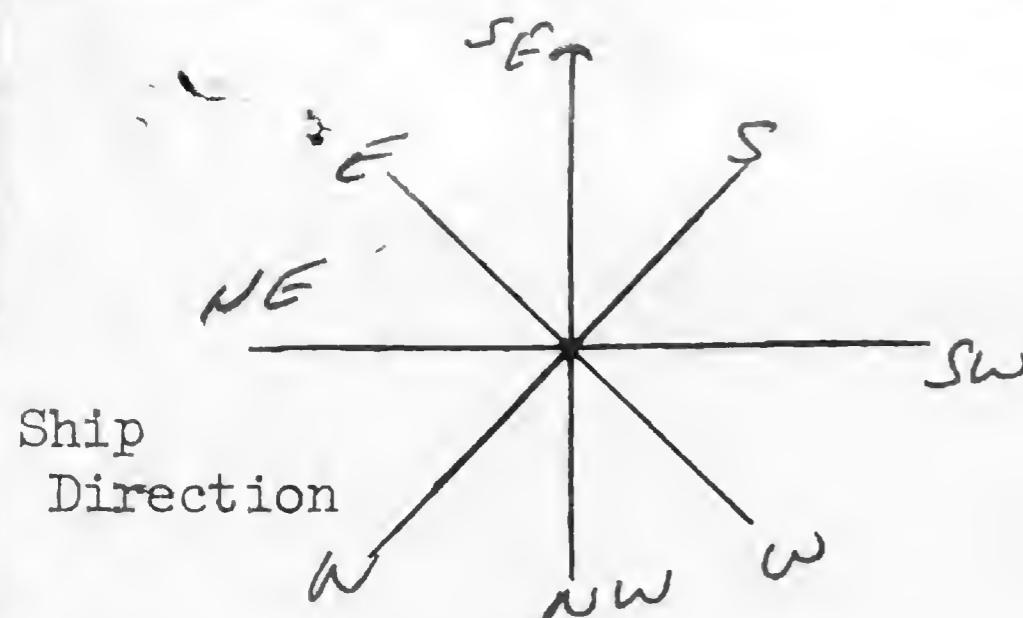
Date 14 JUNE
Pg. # 1

SPECIMEN
or

ZT 2087

Leewards 19

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS	
1300					open ales.	
1305	BFB	1	O		sitting in H ₂ O	30, 12 WTS. 106 ✓
1306	RFB	2	O		immature	
1307	Bulwer's	2	SE			Newell's 26 ✓
1317	WTS.	1	SE		Light phase	55 Shannette 1 ✓
1322	WTS	1	SE		" "	Bulwer's 27 ✓
1323	Brown B.	1	O		ADULT ♀	✓
1324	Sooty T.	1	O		ADULT	2 TSB - 6 ✓
1325	Bulwer's	1	O			25, 1 RFB - 35 ✓
1345	Bulwer's	1	O			12, 2 BB - 16 ✓
1346	RFB	1	O			20, 2 ST 111 ✓
1347	Brown B.	1	O		adults	10 GBT - 10 ✓
1348	Bulwer's	1	O			FT - 1 ✓
1349	Fairy T.	1	O		feeding	30, 8 CNT - 67 ✓
1350	BFB	3	O		adults, sitting on water.	368
1355	Sooty T.	1	O			38
1359	RFB	1	O		ADULT	406
1359	Bulwer's	1	O		ADULT LT. ph	
1403	WTS	1	O			
1403	Sooty T.	1	SE		LT ph.	
1407	Sooty T.	1	SE		ADULT	
1412	Bulwer's	1	O		ADULT	
1440	RFB	1	NW			
1443	WTS.	1	SW		LT. ph. ADULT.	708
1500	RFB	1	SE		LT ph.	9
1504	Newell's	1	NE		AD LT.	67
1510	RFB	1	SE		ADLT	
1511	ST	1	SE		ADLT	
1512	WTS.	1	O			61
1525	RFB	1	O			
1526	ST	1	NW		ADLT	
1527	Bulwer's	1	N		ADLT	
1534	Bulwer's	1	N			
1535	WTS.	1	N			
1538	ST	2	N		on H ₂ O, LT	
1540	Bulwer's	1	NW		ADLT	
1543	Bulwer's	1	NW		ADLT	
1546	W.T.S.	1	SE		ADLT	



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:
Thompson

Date 14 June 1967
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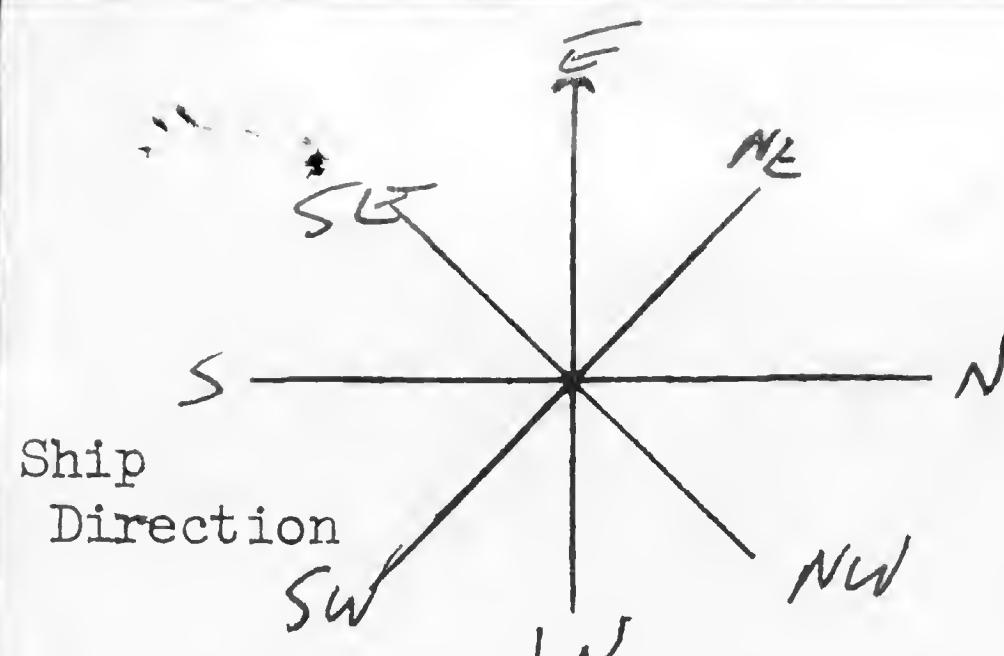
SPECIMEN
or

LT 2087

Leland #19

TIME SPECIES # DIR. BAND NO. REMARKS

1550	Bulwer's	2	NE	
FF 1551	W.T.S.	1		
1555	RFB	25±3	Q	18 Ad LT, 6 Imm
	CNT	30±5	Q	
	Newell's	8	Q	on H ₂ O
	W.T.S.	30±5	Q	3 DK, other LT
	BB	12	Q	Ad
	ST	20±5	Q	
1604	CNT	2	Q	
	ST	2	Q	
TF 1610	CNT	8	SW	
1612	Newell's	1	N	
1614	ST	2	NW	Ad
1624	ST	4	Q	
1625	W.T.S.	2	Q	LT
1630	CNT	3	N	
	ST	1	Q	
1631	Bulwer's	2	N	Ad
1632	ST	1	E	
1633	ST	1	S	
1636	CNT	1	NW	
1637	Bulwer's	1	NW	
1638	Newell's	1	NW	
1639	Bulwer's	1	SW	
1640	RFB	1	NW	
1642	ST	1	N	Ad LT
1643	Bulwer's	4	SW	Ad
1646	ST	11	NE	Ad
	W.T.S.	1	Q	
1650	ST.	1	Q	DK phase
FF 1654	ST.	2	W	Ad. Feeding
	BB	2	Q	
	RFB	2	Q	on H ₂ O
	RFB	1	Q	"
	GBT	10	Q	"
	white sp.			every small fish 30'



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

1700-1900 - Tux
1900 - 55 chus

SPECIMEN
or

LT 2087

leeward

Date 14 June
Pg. # 3

TIME - SPECIES # DIR. BAND NO. REMARKS

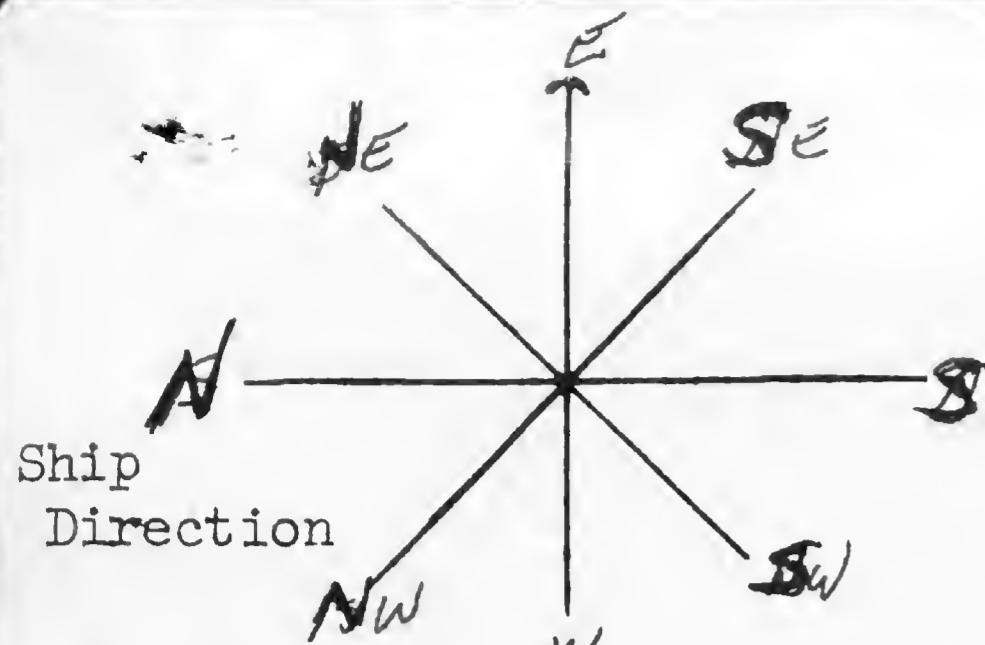
1700	W.T.S.	1	Q	Lt. ph.
1701	Sooty T.	2	Q	ADULTS
1703	Sooty T.	4	SW	adults
1703	W.T.S.	4	Q	Lt ph
1705	Sooty T.	3	Q	ADULTS
1707	W.T.S.	3	Q	2LT, 1OK ph.
1708	Sooty T.	4	Q	ADULTS
1711	W.T.S.	2	Q	LT ph.
1713	C.Noddy	1	N	ADULTS
1713	Sooty T.	3	N	ADULTS
1715	Newell's	3	Q	SITTING ON T20
1718	Newell's	1	Q	W.T.S.
	C.Noddy	Q	W	OK ph,
1719	Sooty T.	2	NE	adults.
1720	Bulwer's	1	Q	
1721	Bulwer's	1	Q	
1722	W.T.S.	1	Q	Lt ph.
1722	Sooty T.	2	N	ADULTS
1723	Newell's	1	NE	
1725	W.T.S.	2	Q	Lt. ph.
1726	Sooty Shearwater	1	NE	white underwing lining
1728	Sooty T.	4	Q	ADULTS.
1729	W.T.S.	1	Q	Lt. ph.
1730	Newell's	1	Q	NE
1733	Sooty T.	4	NE	adults
1735	W.T.S.	1	NE	Lt ph.
1738	Bulwer's	1	SW	
1739	W.T.S.	1	N	
1741	W.T.S.	1	W	Lt ph.
1743	Sooty T.	3	NE	" "
1748	C.Noddy	1	NE	adults
1800	W.T.S.	2	Q	LT
1805	CNT	3	Q	LT
1806	W.T.S.	4	Q	AD
1807	S.T.	3	Q	
1807	CNT	2	Q	
1810	W.T.S.	8	Q	LT - wt a flock - sweep.

1809 6 mammals

Probable
probable
probable
probable
probable
probable

Blunt
nas

Bleek 18-20' feet



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

TUV - 1700-1900
Chris 1900-55

Date 14 June '67
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SPECIMEN

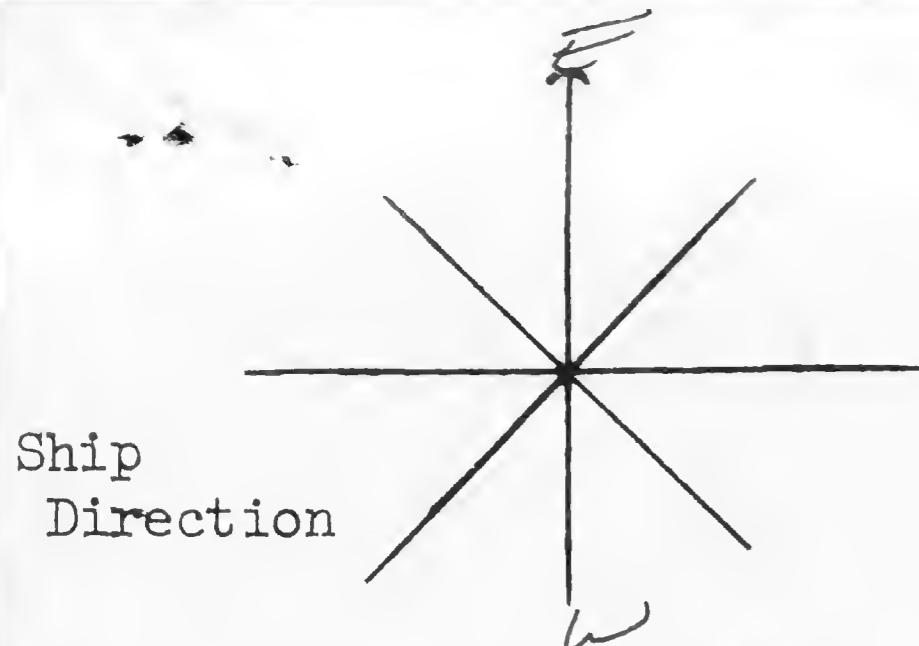
or

DIR. BAND NO. REMARKS

LT 2087

Leewards 19

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1826	Sooty T.	2.			adult.
1826	Bulwer's	1			
1826	WTS	2	W		Yph
1827	Bulwer's	1			
1830	Bulwer's	1	N		
1832	W.T.S.	1	O		lt.ph.
1833	Sooty T.	1	N		adult.
1834	W.T.S.	2	O		lt.ph.
1840	Sooty T.	2	NW		adults.
1840	Common Noddy	1	O		
1842	W.T.S.	2	N		lt.ph.
1843	Bulwer's	1	O		
1844	Newell's	1	O		
1846	W.T.S.	3	O		
1850	ST	4	W		2T
1854	Common Noddy	1	SW		
1855	WTS	1	N		lt.ph.
1856	ST	2	O		
1856	Newell's	1	NE		
1857	WTS	1	NE		slph
1858	WTS	1	NE		
1900	Newell's	1	O		lt.ph.
1901	CNT	1	SE		
1902	WTS	1	S		
1903	CNT	4	SW		2T
1905	W.T.S.	3	O		Sweer cont
1906	CNT	1	O		20
1907	ST	1.	5		DD
1908	Bulwer's	1	E		
1909	Newell's	1	W		
1910	W.T.S.	1	W		DK
1911	W.T.S.	3	N		
1912	C.N.T.	1	S		
1913	CNT	3	SW		
1914	Newell's	1	NE		



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 14 June '67
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SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1915	S.T.	3	W		AD
1916	C.N.T.	1	W		
1917	W.T.S.	1	W		
1918	C.N.T.	1	Q		863-245 - Blue screamer - D. T. L. xson
1919	W.T.S.	1	W		2T
1920	Newell's	2	Q		
1923	S.T.	3	S		AD
1924	NEWELLS	2			SITTING ON THE POT- 
1925	S.T.	1	W		AD
1928					CLOSE OBSERVATION SUNSET
		13			

167
41
54
106
368